

**A QUASI EXPERIMENTAL STUDY TO ASSESS THE
EFFEVTIVENESS OF STRUCTUED TEACHING PROGRAM
ON KNOWLEDGE REGARDING ANTENATAL CARE DURING
FIRST AND SECOND TRIMESTER AMONG PRIMIGRAVIDA
MOTHERS IN RURAL PRIMARY HEALTH
CENTER SAKKAYANAYAKKNOOR,
AT DINDIGAL DISTRICT**



REGISTER NO: 301323052

**A DISSERTATION SUBMITTED TO THE TAMILNADU
DR.MGR.MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL
FULFILLMENT FOR THE DEGREE OF MASTER
OF SCIENCE IN NURSING
OCTOBER 2015**

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EXTERNAL EXAMINER

INTERNAL EXAMINER

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CERTIFICATE

This is the bonafide work of 301323052. . M.s.c Nursing II year student from Jainee College of Nursing, Dindigal, submitted in , in partial fulfillment for the Degree of Master of Science in Nursing, under The Tamilnadu Dr.MGR.Medical University,Chennai.

Prof.Mrs.K.Thilagavathi, M.Sc., (Nursing) Ph.d.,
Principal,
Department of Obstrical and ghynaecological nursing.
Jainee College of Nursing,
Dindigal.

Place :

Date :

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APPROVED BY DISSERTATION COMMITTEE ON: -----

PROFESSOR IN NURSING

RESEARCH : _____
Prof.Mrs.K.Thilagavathi, M.Sc., (Nursing) Ph.d.,
Principal,
Department of Psychiatric Nursing.
Jaimee College of Nursing,
Dindigal.

CLINICAL SPECIALITY

EXPERT : _____
Prof.Mrs.k.kavitha , M.Sc., (Nursing) Ph.d.,
lecturer,
Obsterical and gynecological nursing
Jaimee College of Nursing,
Dindigal.

MEDICAL EXPERT : _____
Dr Uma Devi, MD. DGO.,
Consultant Gynecologist
Saradha Hospital ,
Dindigal.

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ACKNOWLEDGEMENT

First and foremost we thank and praise the almighty god for giving me all the wisdom, knowledge, strength and guidance to complete this study successfully.

I express my sincere thanks to **Mr.SUKUMAR**, correspondent, Jainee college of nursing dindigal, for this support and for providing all the facilities for the successful completion of this study.

“Things do not turn up in this world until somebody turns them up” I extend my thanks to our most honoured personality **Prof. K.THILAGAVATHI, Ph.D.**, Principal, Jainee College of Nursing for his acceptance and approval of the study.

My deep sense of gratitude is expressed to **Ms.MEERA,M.sc** Nursing, vice principal, jainee college of Nursing for her concern and motivation.

It is my pleasure and heartfelt thanks to **Mr.MANI, M.SC,M.A, M.PHIL,M.A,PHD,ASSISSTENT DIRECTOR, ASSISSTENT PROFESSOR** (Phycology,sociology) Gandhi gram university.

My sincere gratitude to **Mr.MANIMOZHISELVAM, M.A. English., M. Ed., P.hd.**, Professor, for editing the tool in English and content for manuscript.

I express my words of appreciation to statistician **Mr.SIVA GURU NATHAN, M.sc**, statistician , department of population research center, gandigram rural university. Gandigram, dindigal, for his expert guidance and suggestions in the statistical analysis of data.

It's my privilege to express my sincere gratitude and heartfelt thanks to **Mrs.KAVITHA.K, M.sc., (Nursing)** Reader department of Obstetric and Gynecological nursing for valuable support.

I extend my sincere thanks to **Mrs. KOKILA P.G** Msc(Nursing) Assistant Professor, Department of Medical Surgical Department, Jainee College of Nursing,

for valuable guidance and support to carry out the dissertation work successfully. “The impossible becomes, to the endowed with resource fullness”.

It’s my privilege to express my sincere gratitude and heartfelt thanks to **Mrs.S.TAMILSELVI, M.Sc., (Nursing)**, Lecturer, department of Community Health Nursing, her valuable guidance in making to understand the basics of research activities.

It’s my pleasure and heartfelt thanks to **Miss. R .MANI MOHZI, M.Sc., (Nursing)**, Lecturer, Department of Medical and Surgical Department, Jainee College of Nursing, for the suggestions to carry out the study successfully.

It is my pleasure and heartfelt thanks to **Mrs. S.PARAMASWARI, B.Sc., (Nursing)**, Nursing tutor, Jainee College of Nursing, for the timely help with her suggestions.

It is my pleasure and heartfelt thanks to **Mrs.ANGELA MARY, PB.B.Sc., (Nursing)**, Nursing Tutor, College of Nursing, who motivates in all occasions during the course.

I extend my sincere thanks to **Dr. Mrs.SAJEETHARACHEAL** Principal, Department of Education, Jainee College of Education, for valuable guidance and support to carry out the dissertation work successfully. “The impossible becomes, to the endowed with resource fullness”.

We are thankful to the librarian **Mr.R. SARAVANAKUMAR** for helping us with literature work and for extending library facilities throughout the study.

My gratitude to **the Subject Experts in other Nursing Institutions & Doctors**, for validating the tool used in the study. They were kind enough to go through the tool and showed the right direction to proceed.

We extend our sincere thanks to my **parents**, for providing guidance. Besides them I extend my thanks to my beloved **sister** and **brother** for their constant support.

I express my immense thanks to my class mates, friends, and loved once for their encouragement and contribution during the study.

We extend our sincere thanks to my **Husband** for providing guidance and support to carry out the study successfully

Our heartfelt thanks to the **computer operators**, for helping us to complete the study successfully.

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ABSTRACT

Statement Of The Problem A quasi experimental study to assess the effectiveness of structured teaching programme on knowledge regarding antenatal care during first and second trimester among primi gravida mothers rural primary health center sakkayanayakanoor at Dindigal .**Objectives Of The Study:**To assess the pre-test level of knowledge regarding antenatal care during first and second trimester among primi gravid mother.To assess the post-test level of knowledge before and after structured teaching programme among primigravida mothers. To test the association between post test knowledge score selected background factors among primigravida mothers. **Hypothesis:** There will be significant between before and after intervention. There will be significant difference between the post test knowledge score and selected demographic variables among primigravid mothers. **Data Collection Procedure:** The research approach used for this study was quantitative approach The research design selected for this study was **Quasi experimental design**. Antenatal care during first and second trimester who fulfilled the inclusion criteria were selected by using Convenient sampling technique. The tools used for data collection was Demographic data was collected through self report. After that assessing problems faced by wives by using the interview. Duration for collection of data is 30 mts. **Conclusion:** Structured teaching program significantly increase the knowledge on selected aspect of antenatal care during first and second trimester. So in future nurse can effective structured teaching program to reduce the maternal mortality rate.



INTRODUCTION

CHAPTER I

INTRODUCTION

BACK GROUND OF THE STUDY

“Thousands of women could be saved each year if they had access to skilled care during pregnancy and child birth, and access to emergency obstetric care. Most of the interventions they need are simple, affordable and highly effective”

“Dr.Lee Jong Wook”

Women pregnant for the first time are confronted with symptom that would be considered abnormal in the non pregnant state, much of the prenatal care requested by such women is prompted by the need for explanation of the causes of minor disorders and for advice on ways to relieve the discomfort Nurses can do much to allay a first time mother’s anxiety about such symptom by telling her about them in advance using terminology that the woman can understand such women who understand physical discomforts of pregnancy are less able to become very anxious about their health in addition to understanding the rationale for treatment promotes their participation in their care.

Pregnancy is a creative and productive period in the life of women. It is one of the physiologic vital events, which needs special care from the conception to postnatal period, every mother wants to enjoy the nine months period with the baby inside her womb. The mothers joyful experience of the pregnancy is not going to be always but sometimes it is associated with problems of some minor ailments that may present among mothers which cause discomfort to the mothers during pregnancy.to them.
(Dutta)

Promotion of maternal and child health has been one of the most important components of the family Welfare Programme of the Government of India and the National Population Policy – 2000. One of the most important component of antenatal care is to offer information and advice to women about pregnancy related complication and possible curative measures for early detection and management of complications. Antenatal care can also play a critical role in preparing a woman and

her family for birth by establishing confidence between the woman and her health care provider and by individualizing promotional health messages. Antenatal care is considered essential for health of both the mother and the child, it is important to analyze the possible factors contributing to its utilization.

The test of any civilization is the measure of consideration and care, which it gives to its weaker sections. In any community, women are especially vulnerable during pregnancy. The maternal mortality ratio (MMR) in India is very high the data given by the registrar general of India for 1998 estimate that MMR to be around 407 per 100,000 live births. (WHO 2005)

Reducing MMR to less than 100 per 100,000 live birth is a commitment enshrined in the national population 2000. India is committed to reducing MMR to less than 100 per 100,000 by the year 2010 from the current 407 / 100,000 live births (SRS, RGI,1998)

Maternal care includes care during pregnancy and should begin from the early stages of pregnancy. Women can success antenatal care service either by visiting a health center where such services are available or from health workers during their domiciliary visits. One of the most important components of antenatal care is to offer information and advice to women about pregnancy related complication and possible curative measures for early detection and management of complication. Antenatal care can also play a critical role in preparing a woman and her family for birth by establishing confidence between the

The purpose of the study is to identify the knowledge and practices of pregnant women regarding different aspects of antenatal care such as diet, antenatal checkups, immunization, adequate sleep and rest, exercise, hygiene, breast care, breastfeeding the health problems and complications of pregnancy to make recommendations to enhance the knowledge and practices of antenatal care by improving the delivery of antenatal services(both quality and quantity) if they are less; and to continue with the present antenatal service rendering status if the knowledge and practices are adequate.

Effective antenatal care can improve the health of the mother and give her a chance to deliver a healthy baby. Regular monitoring during pregnancy can help detect the complication at an early stage before they become life – threatening emergency. However, one must realize that even the most effective scanning tools

currently available, one cannot predict which will develop pregnancy related complication. Hence, every pregnant women needs special care.

Pregnancy is considered as a normal physiological process during the reproductive age, but stands for mortality of the mother and child if not cared properly during pregnancy period. Most women experience Minor Ailments or side effects during their pregnancies usually nausea and vomiting heart burn, frequency of urination, hemorrhoids, Back Ache, constipation , cough, hiccough varicose vein anxiety during pregnancy, acidity and heart burn abnormal carving, leg cramps and oedema.

In India the morbidity among women may also increase with the decreasing consumption of food and increasing work burden, Cheshire has remarked that women's minor disorders ahead with or without medication. Good understanding of both traditional and modern medical view will go along the way in minimizing the disorders associated with pregnancy.

Pregnancy refers to the fertilization and development of one or more offspring known as a fetus or embryo, in woman's uterus. Pregnancy is an experience full of growth change, enrichment and challenge. Pregnancy is a normal process that results in a series of both physiological and psychological changes in a woman. Some of these are temporary changes that occur during pregnancy; others extend for a period of time after pregnancy; still others are permanent .The female body adapts to this change normally. Physiological changes of pregnancy occur gradually, but eventually affect all organ systems of the woman's body. Pregnant women are usually very motivated to learn about their bodies and about activities that will improve their chances for a healthy outcome.

Pregnancy is the biggest physiological upheaval of a woman's life. From the moment of conception, significant physiological changes occur in the expectant mother's body that are necessary to support and nourish the fetus, to prepare her for child birth and lactation and to maintain her health. Early physiological changes are due to the metabolic demands brought on by the fetus, placenta and uterus and due to the increasing levels of pregnancy hormones such as progesterone and estrogen. Later changes are anatomical in nature and are caused by the mechanical pressure from the expanding uterus. Physiological changes that occur during pregnancy can be

categorized as local (confined to the reproductive organs) or systemic (affecting the entire body). Both the symptoms

Antenatal care refers to pregnancy related health care provided by a doctor or a health worker in medical facility or at home. Antenatal care should monitor a pregnancy for signs of complication detect and treat pre-existing and concurrent problems of pregnancy. It should also provide advice and counseling or preventive care, diet during pregnancy, delivery care, postnatal care and related issues. An antenatal care is necessary for ensuring a healthy mother and baby at the end of gestation. The antenatal period is a time of physical and psychological preparation of birth and parenthood. Becoming a parent is a time of intense learning both for parents and for those close to them.

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The purpose of the study is to identify the knowledge and practices of pregnant women regarding different aspects of antenatal care such as diet, antenatal checkups, immunization, adequate sleep and rest, exercise, hygiene, breast care, breastfeeding the health problems and complications of pregnancy to make recommendations to enhance the knowledge and practices of antenatal care by improving the delivery of antenatal services(both quality and quantity) if they are less; and to continue with the present antenatal service rendering status if the knowledge and practices are adequate.

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currently available, one cannot predict which will develop pregnancy related complication. Hence, every pregnant women needs special care.

NEED FOR STUDY

“To become a mother is one of life’s greatest blessings. It is a lifelong event that forever changes you. Becoming a mother changes your heart, your thoughts, and your actions. However, you may soon wish you had a few extra hand”.

The knowledge of pregnant women regarding antenatal care and their compliance to it is of paramount importance in preventing maternal and infant mortality rate and morbidity. The Indian society is made of large number of socio-culturally diverse groups. Their views of antenatal care and the health care system in general, may be different. The disparity of their knowledge and practice has to be assessed for improving the delivery of such services to these groups Majority (76.8%) of the respondents attended ANC(Antenatal care) clinic. Women in urban areas were more than 2 times likely to attend antenatal clinic than women in urban areas [(OR=2.177, 95% CI, 1.081-4.382)]. Women who were Muslims or other religions were more than 2 times likely to attend ANC clinic than women who were Christians [(OR=2.398, 95% CI, 1.264-4.557)]. Also, Women who were 25 years and older were more than 2 times more likely to utilize antenatalfor the services to be underused³. In the developing countries, these problems are even more prevalent due to the current socioeconomic conditions and inaccessibility of health facilities⁴. The utilization of maternal health service definitely is essential strategy in reducing the risks associated with pregnancy and child bearing in this age group¹. The essential maternal health care services during pregnancy included antenatal care, skilled care at delivery and postpartum care and these are necessary to promote good health. Antenatal care is the care received during pregnancy from skilled health personnel such as the goal oriented model recommended by the WHO which include 4-5 visits for pregnant women who are not having medical problems⁵. Antenatal care utilization (65%) in the developing countries is low when compared to that of the developed countries which is 97%. Skilled attendance at delivery is 53% in developing countries while it is 99% in the developed countries and postpartum care utilization is 30% compared to 90% in developed countries⁵. In Nigeria antenatal care utilization is reported to be 63%⁶

The antenatal period is a very special time where women undergo the transition into motherhood. During this period the anemic. In India over 54% of pregnant women are anemic and for every 1, 00,000 live births there are 301 maternal deaths in India. This can be reduced by registering the pregnancy in hospital or centre and mainly should counsel to come for follow up visit till the \baby is born safely. “In India majority of mothers are poor and malnourished and live under unsanitary condition. Maternal (301/1,00,000 live birth) and infant mortality rates (57/1000 live birth) are high compare to other developing countries. Inthelightthisfact,weneed to improve the health of the antenatal mothers by providing antenatal care the safe motherhood implies good health of the pregnant women during pregnancy and also ensures good health of the body. In other words safe motherhood is related to maternal and prenatal mortality and morbidity of 100-200 million deliveries occurring worldwide. 5 lakhs women die during pregnancy, childbirth or soon after”.

In this study the participation of women in taking decisions concerning their health did not have a significant effect on the use of antenatal care service. This finding is consistent with other studies that have examined the influence of women's autonomy on various health outcomes. A study which used data from a maternal health study carried out in the slums of Nairobi, Kenya found no significant effect of women's participation in decision making concerning their health on the utilization of maternal health services 15; a study in Nepal also found that the influences of women's involvement in decision-making regarding their own health or large purchases on antenat al care attendance were rather weak16. However, Bloom et al found a conflicting result on the influence of women’s participation in making decisions about their health when their findings demonstrated that women's autonomy was a major determinant of maternal health care utilization among urban poor to middle-income women in a North Indian city17. Health care service provision in India is very diverse, with rural services achieving considerably less coverage than their urban counterparts. Inrural Karnataka, maternal health care indicators compare favourably with those of rural India as a whole, but nevertheless, only 26 per cent of births are institutional and antenatal care is not universal. Table 1 gives estimates of indicators from rural Karnataka, rural Uttar Pradesh (a state with low provision of services) and rural Kerala (a state that is known for superior maternal care). These

estimates are taken from the Indian National Family Health Survey carried out in 1992/93 (IIPS, 1993).

The main objective of the present study was to explore the utilization of health care services during pregnancy period of currently married women in Tamilnadu and Karnataka states of south India. The data was extracted from National Family Health Survey-3 (NFHS-3) conducted during 2005-2006. A total of 1314 currently married women in Tamilnadu state and 1542 in Karnataka state were considered for the study. The present study highlights that only 0.9% of the women did not receive antenatal check-up during pregnancy period in Tamilnadu, whereas it was 9.4% in Karnataka. With regard to TT vaccination and IFA tablets, 1.3% and 7.5% of the women did not receive TT injection and IFA tablets in Tamilnadu while the figures were 12.0% and 25.5% respectively in Karnataka. Cross tabulations were applied for the analysis and chi-square test was also used to determine the significant relationship between the variables. It can be concluded that the pregnant women in Tamilnadu more likely utilize the antenatal care than the women lived in Karnataka.

STATEMENT OF THE PROBLEM

A quasiexperimental study to assess the effectiveness of structured teaching program on knowledge regarding antenatal care during first and second trimester primigravida mothers in selected rural primary health center in Sakayanayakanoor at Dindigul district.

OBJECTIVE OF THE STUDY

- To assess the pre-test level of knowledge regarding antenatal care among primigravida mothers
- To assess the post-test level of knowledge before and after structured teaching program among primigravida mothers.
- To test the association between post test knowledge score selected background factors among primigravida mothers.

HYPOTHESES

H1: There will be significant difference between before and after the intervention.

H2: There will be significant difference between the post test knowledge score and the selected demographic variables among primi mothers.

OPERATIONAL DEFINITIONS

Assess – It refers to the method of estimating the level of knowledge. In this study level of knowledge was assessed by knowledge tool.

Knowledge- It refers to the information gained by the Primi mothers regarding the selected aspects of Antenatal care

Effectiveness- The change in the knowledge level of Primi on selected aspects of Antenatal care as a result of structured teaching program which is measure through interview.

Primi Antenatal mothers- A mother who got pregnant first time. In this study first and second trimester .Antenatal mothers were choose as sample.

Structured Teaching Program – It refers to the systematically organized instructions regarding selected aspects of Antenatal care to group of Primi mothers by using power point presentation.

Antenatal care – Antenatal care comprises of systemic, regular and periodic supervision of the pregnant women from the commencement of pregnancy until the onset of labour. In this study knowledge on antenatal care was assessed by knowledge tool.

First trimester –Refers to time period extending from the first day last menstrual period through 12 weeks of pregnancy.

Second trimester –Refers to time period of pregnancy extending from the 13th to the 27th week of gestation.

Primary health center – PHC is the basic structural and functional unit of the public health services in developing countries.

ASSUMPTIONS

- Antenatal care promotes a healthy life of the mother.
- Group teaching will enhance the active learning.
- Knowledge of mother has strong influence in adoption of healthy behaviors

DE-LIMITATION

- The study was limited to only primigravida mothers of first and second trimester.
- Sample size was restricted to 60.

PROJECTED OUT COME

This study reveals the effectiveness of structure teaching programme on knowledge regarding antenatal care among primi mothers. The result of the study showed there was increase in knowledge regarding antenatal care during first and second trimester. The Findings of the study helps the professionals in educating the primi mothers about antenatal care.



REVIEW OF LITERATURE

CHAPTER II

REVIEW OF LITRATURE

Review of literature is defined as broad, comprehensive in depth systematic and critical review of scholarly publication, unpublished scholarly print materials, audiovisual materials and personal communications. Review of literature is a key step in research process. Review of literature refers to an extensive, exhaustive and systemic examination of publication relevant to research project. One of the most satisfying aspects of the literature review is the contribution it makes to the new knowledge, insight, and general scholarship of the researchers

Review of literature consists of three parts.

PART I: Literature related to Antenatal care

PART II: Literature related to Minor disorder in pregnancy

PART III : Literature related to physiological changes during pregnancy.

PART I: LITERATURE RELATED ANTENATAL CARE

KISHK N (2010) conducted a comparative study to assess the Knowledge and Practices towards ANC between rural and urban women in Alexandria a cross sectional, community – based house to house survey was conducted in Alexandria using cluster – sampling technique 30 clusters from urban areas and 30 cluster from rural areas. Concerning maternal practices the current study revealed rural/ urban disparities as significantly higher proportions of urban women had proper practices during antenatal period in their last pregnancy as regards utilization earlier initiation and frequent visits of antenatal care.

of Institutional deliveries managed by hospitals and health centers was about 41% , it being higher among literate women and in urban areas. The study revealed that the literacy of women is the key to improve antenatal care of pregnant women. Hence efforts should be made to have information, Education and Communication

C.S.Metgud, S. 2010 conducted a study of Utilization Patterns of Antenatal care among Pregnant women all women (n=130) village in Tanzania who were pregnant at the start of the study and who became pregnant during the study. Most of

the pregnant women (92.31%) were registered for antenatal care, but only 30.00% of them were registered in the 1st trimester of pregnancy. As regards to TT immunisation 70.77% of the pregnant women as received two doses or one booster dose iron and folic acid supplementation was taken by 59.68% of the pregnant women. Nearly 39.52% of the pregnant women were provided with full antenatal care. The main antenatal care provided for the pregnant women was doctor (64.52%). The study shows early and wide spread of the antenatal care, but it also reveals that the antenatal visits occur late in pregnancy.

Kiwawa S (2011) conducted a study about the use of antenatal care maternity services for the pregnant women in Lewero Dist in Uganda. A sample size of 769 women in the viewed, among that 417 visiting initially, during second trimester 242, during third trimester 266. About the use of antenatal services most the woman delivered in health centers (28.7%), (26.4%) delivered from home, (18.2%) in private maternity homes and (13.8%) in hospital. About maternity service utilization approximately (59.2%) gave birth with a skilled attendant present others delivered other by themselves or with help of at relatives, friends and traditional birth attenders.

Yawar A (2011) performed a cross sectional survey to access the knowledge and practice of women utilizing and not utilizing antenatal care facilities during their previous pregnancy among 200 married women in the age range 15-49 years were compared by the calculating odds ratios and 95% confidence intervals. Studied showed Pallor was significantly lower among women utilizing antenatal care (57%) as compared to those who were not (77.6%) (O.R.38.95% CI (. 18-81) p value.02). Tetanus toxoid coverage was higher among women utilizing antenatal care (92%) compared to those who were not (59.2%) (O.R 10.8 95% CI

Singh P, (2012) conducted a study to assess the status of antenatal care among pregnant women in India. In that study 89% of the pregnant women availed antenatal visits of which 62% had received three or more ANC visits. Those receiving the second dose of TT or booster dose were about 78%. About 73% of the pregnant women received IFA tablets during their pregnancy. About 53% of the pregnant women had full package proportion of pregnant women who availed full ANC package was lower in rural as compared to urban areas, lowest for (4.5-26.2). Knowledge about danger signals in pregnancy and realization of the importance of eating healthy diet during pregnancy was significantly higher among utilizing antenatal care. The finding reveals that Lesser prevalence of Anaemia and better

tetanus toxoid coverage was seen among women attending antenatal care facilities. Identification of danger signals in pregnancy and recognition of nutritional demands of pregnancy are better understood by women utilizing antenatal care facilities.

Adil H (2012) performed a study about utilization of routine antenatal health care services in Khartoum State, Sudan. Interviews were held among a representative sample of 400 married women aged 15 – 49 years from both urban and rural localities. The frequency of antenatal visits was approximately 5 times and application of TT vaccination was 3.7 times higher in urban women as compared to women in rural areas. A higher quality of care (odds ratio 5.8) and shorter walk time (odds ratio 3.1) were significantly associated with more utilization of routine antenatal care services. Mother education showed a nearly significant positive relationship both with use of routine antenatal health care services (odds ratio 2.1).

Susila. C (2012) performed a study to assess the level of self motivation of primigravidae mothers towards antenatal care at Sree Ramachandra Hospital and Research institute Chennai, among 100 mothers only 8% of the mothers were with high level of self motivation towards receiving or following the antenatal care and she finds that there is a responsibility for the nurses to increase the level self motivation among antenatal mothers. Are women and providers satisfied with antenatal care? Views on a standard and a simplified evidence-based model of care in four developing countries. *BMC Womens Health* 2002;2(1):7. This study is a nested cohort questionnaire based trial, located within the WHO RCT on evidence based antenatal care reported above. 1600 women were randomly selected to evaluate their satisfaction with an alternative model of antenatal care involving fewer visits. A further questionnaire was sent to 174 antenatal care providers²⁰. The majority of women in both arms expressed satisfaction with ANC. More women in the intervention arm were satisfied with information on labour, delivery, family planning, pregnancy complications and emergency procedures. More providers in the experimental clinics were worried about visit spacing, but more satisfied with the time spent and information provided. Women under the new ANC model were slightly less satisfied with the number of visits²⁰.

Hunt J (2013). Are recommendations about routine antenatal care in Australia consistent and evidence-based? *Medical Journal of Australia* 2002;176(6):255-9. This Australian study comparing the recommendations from local protocols, national guidelines and research pertaining to aspects of antenatal care including number of

visits found that national policies about the number of routine visits could be identified. Of those protocols identified, eighty (75%) included a recommendation about the number and timing of visits for routine antenatal care. Most protocols described the “Standard” schedule of antenatal visits as every four weeks until 28 weeks’ gestation, then every two weeks until 36 weeks, then every week until 40 weeks or delivery. Fewer visits or a more flexible approach were described in 12 protocols (15%), and extra routine visits, all relating to shared-care arrangements, were recommended in five (6%)⁵. The source of Australia’s predominant ‘standard’ schedule reported in this study is the 1929 policy

PART II MINOR DISORDER PREGNANCY

ISFAHAN (2014) A study was conducted to determine the effect of ginger in nausea and vomiting of pregnancy in Isfahan (2009). It was a single blind clinical trial study. The subject included sixty seven pregnant women who complained of nausea and vomiting from Isfahan city hospital. The participants were randomly assigned to two groups an experimental group and a control group. The experimental group received ginger 250 mg capsules for four days and the control group received placebo with the same prescription form. The ginger was demonstrated a high rate of improvement than the placebo users (85% versus 56% : $P < 0.01$). The result shows that ginger is an effective herbal remedy for decreasing nausea and vomiting during pregnancy

Germany (2013) A study was conducted regarding Gastro esophageal reflux disease and management in advanced pregnancy in Germany (2009). A prospective study was conducted to determine the prevalence of Gastro esophageal reflux disease, the frequency and severity of typical gastro esophageal reflux disease symptom, and their impact on quality of life and therapeutic management in advanced pregnancy. 135 consecutive pregnant women in the third trimester were included in the study. Result reveals that the prevalence for gastro esophageal reflux disease in this unselected population was 56.3%. Among symptom regurgitation was the most frequent with 47.3%, where as heart burn was graded as the most severe symptom. The impact of Gastro esophageal reflux disease on the quality of life of the pregnant women was significant ($P < 0.001$). 22.9% of the gastro esophageal reflux disease

population required medication. It shows that, gastro esophageal reflux is common in late pregnancy with an important negative impact on the quality of life. Gastro esophageal reflux disease in advance pregnancy requires more attention and better therapeutic management.

Tornato (2013) A study was conducted to determine whether decreasing iron exposure can mitigate nausea and vomiting symptom in pregnancy in Tornato (2009). Data collected from a prospective cohort at the mother sick programme in Tornato, 97 women seeking advice on managing severe nausea and vomiting were advised to discontinue prenatal multivitamin administration and switch to folic acid. Two thirds (63 out of 97)($P < 0.001$) of those women qualitatively reported an improvement in nausea and vomiting symptom after discontinuation of iron-containing prenatal multivitamins. These data suggest that avoiding iron-containing prenatal multivitamins in the first trimester is effective in improving morning sickness.

South Africa (2011) A study was conducted to assess the effect of treatment to relieve the symptom associated with varicosity in pregnancy and to reduce leg edema in South Africa (2006). Four trails of three different treatments were included. In one trail, women give rutoside capsules in the last 3 months of pregnancy noted an improvement in symptoms compared with placebo (relative risk 0.54%, 95%, CI 0.32, 0.89). In other trail women were treated with external pneumatic intermittent compression for 30 minutes to reduce reduce leg edema in another trail compression stocking prophylatically reduced the emergencies of leg symptoms (relative risk 0.74 95% CI 0.59, 0.93). Thus the result shows rutosides appear to relieve symptoms of venous insufficiency in late pregnancy, external pneumatic compression appears to reduce ankle swelling and compression stocking reduce leg symptoms.

Koken G. (2010) Study conducted on Nausea and vomiting in early pregnancy relationship with anxiety and depression. 230 women were investigated, by using the Rhode's system. These scores and demographic data were compared and $P < 0.05$ was considered significant. As a result a significant correlation between Rhode's score and both anxiety ($r=0.388$, $P < 0.001$) and depression score, ($r=0.351$, $P < 0.001$) was found. Gestational age showed and inverse correlation with anxiety scores ($P=0.019$). There was no significant correlation between demographic data and anxiety/depression scores, or Rhode's scores. The findings suggest that there is an

association between anxiety and depression early in pregnancy and severity of Nausea and vomiting of pregnancy

Lacasse A, Berard (2010) Study conducted on the Nausea and the Vomiting of Pregnancy specific health related quality of life (QOL) questionnaires. As a result 367 women included in the study, 288 (78.5%) reported Nausea and the Vomiting of Pregnancy in the first trimester of pregnancy. Among these women, the Cronbach's alpha coefficients were high for the complete Nausea and the Vomiting of Pregnancy quality of life questionnaire (alpha = 0.98), and for the four distinct domains [physical symptoms and aggravating factors (alpha = 0.90); fatigue (alpha = 0.94); emotions (alpha = 0.86); limitations (alpha = 0.97)]. The findings suggest that the Nausea and the Vomiting quality of life is a reliable and valid index to measure NVP-specific QOL in the first trimester of pregnancy.

Anderson AM (2013) Study conducted on Pica in pregnancy in a privileged population: myth or reality. Most studies have focused on less privileged populations, but is pica prevalent among privileged pregnant women? 100,000 pregnant women in the Danish National Birth Cohort were asked about pica in a food frequency questionnaire mailed in gestation week 25. As a result the response rate of the questionnaire was 70% of Danish National Birth Cohort participants. Only 14 women reported to have eaten substances that were clearly not foods, i.e. 0.02% had pica in this cohort of well nourished Danish women. The findings suggest that it seems that, in privileged populations, pica is more a myth than a reality.

Madugu HN (2012) Study conducted to determine the prevalence of pica, and factors associated with pica in pregnant women in Zaria. Using a structured questionnaire administered by medical staff and mothers. Statistical analyses included 95% confidence intervals, chi-squared and Fisher's exact tests. The prevalence of pica among the subjects was 50%. The prevalence of non-food pica was significantly higher than that for food pica (difference = 17.8%, 95% confidence interval = 8.3 to 27.3%). There was a significant association between pica in family, friends or other members of the community and pica in the index pregnancy (chi 2 = 10.78, p = 0.007). Pica is common in pregnant women in Zaria, and their care should, therefore, include adequate dietary history and counselling. There is also a need to raise public awareness of the adverse effects of this practice.

Palma PC (2010) Descriptive study was conducted to determine the frequency pattern of presentation and causative agents of lower urinary tract symptoms in pregnant females. One thousand consecutive pregnant women, attending the antenatal clinic were included in the study. All women underwent complete examination of urine. Out of one thousand pregnant women, 426 (42.6%) complained of one or more urinary symptoms. Diurnal and nocturnal frequency was the most commonly encountered symptom (87.32%), followed by irritative symptoms and voiding difficulties. Complete urine examination of symptomatic patients revealed <5 pus cells /HPF (high power field) in 322 cases and 6-20 pus cell/HPF in the remaining 104 cases. The urine culture of the symptomatic patients (426 cases) showed growth in only 37 cases (8.69%). *Escherichia (E.) coli* was the commonest organism (89.1%) followed by *Staphylococcus (S.) aureus* (8.1%) and candidiasis (2.7%). The finding suggest that Lower urinary tract symptoms are frequently present in pregnant women, which can be due to both pregnancy-induced changes on urinary system as well as urinary infection.

Morair S Herrmann Y. (2012) Study conducted on the prevalence of irritative bladder symptoms of women in the third trimester of pregnancy and the correlation to parity and route of delivery. As a result 80.6% presented nocturia, 70.3% presented urinary frequency and 44.4% presented urgency. No statistic correlation was observed between irritative bladder symptoms and route of delivery however, when considering parity, nocturia and urinary frequency were significantly more frequent in multiparous women. The finding suggests that in the population under study pregnancy percentage was associated to a high prevalence of irritative bladder symptoms.

Hart Din (2010) Study conducted on heartburn with associated oesophagitis is experienced by 45% to 70% of pregnant women. Posture is the most constant associated factor; bile regurgitation through the pylorus is likely to be important in its etiology but gastric acidity is not. Treatment with alkalis or dilute hydrochloric acid affords some relief in 95% of cases and relief in 95% of cases and patient acceptability is the most important factor in choice of preparation. Hiatus hernia is likely to be present in severe cases and rupture of the oesophagus has been reported. Early delivery may be advisable in the interest of the mother.

Robertson EJ Moshal MG (2010) Study conducted on heartburn, thought to indicate reflux of gastric contents into the oesophagus, occurs frequently in

pregnant women during the last trimester, its etiology is not clear. Prolactin blood concentrations rise progressively during pregnancy and heartburn is known to disappear spontaneously during the last weeks of pregnancy. Results show that patients with prolactin levels over 3,000 micro units/ml had significantly higher mean barrier pressures (sphincter pressure-gastric pressure) than the patients with hormone levels of less than 3,000 micro units/ml (P less than 0,02). No direct correlation could, however, be demonstrated between barrier pressures and prolactin levels ($r = 0,3494$). It is concluded that further studies would seem to be indicated on any model to establish the importance of prolactin in the regulation of the lower oesophageal sphincter tone.

PART III : LITRATURE RELATED TO PHYSIOLOGICAL CHANGES DURING PREGNANCY

Turan (2011) Pregnancy is associated with significant anatomic and physiologic remodeling of the cardiovascular system. Ventricular wall mass, myocardial contractility, and cardiac compliance increase. Both heart rate and stroke volume increase in pregnancy leading to a 30–50% increase in maternal cardiac output (CO) from 4 to 6 l/min. These changes occur primarily early in pregnancy, and 75% of the increase will occur by the end of the first trimester. CO plateaus between 28 and 32 weeks gestation, and then does not change significantly until delivery. During the third trimester, the increase in heart rate becomes primarily responsible for maintaining the increase in CO. This increase in CO is preferential in which uterine blood flow increases 10-fold (17% of total CO compared with 2% pre-pregnancy) and renal blood flow increases 50%; whereas there is minimal alterations to liver and brain blood flow. In addition, when compared with nulliparous women, multiparous women have higher CO (5.6 vs. 5.2 l/min), stroke volume (73.5 vs. 70.5 mL), and higher heart rate. During labor and immediately after delivery, CO increases as a result of increased blood volume (300–500 mL) with each uterine contraction, and then secondarily to “auto-transfusion” or the redirection of blood from the uteroplacental unit back to the maternal circulation after delivery. As CO increases, pregnant women experience a significant decrease in both systemic and pulmonary vascular resistances. Secondary to the vasodilatory effects of progesterone, nitric oxide and prostaglandins, systemic vascular resistances, and blood pressure decrease early in pregnancy, reaching their lowest point at 20–24 weeks, and leading to

physiologic hypotension. Following this decrease, vascular resistances and secondarily blood pressure begin rising again, approaching the pre-pregnancy values by term. This is especially important in patients with preexisting hypertension and who are on antihypertensive drugs.

Carbillon p (2013) Starting at 6-8 weeks of gestation and peaking at 32 weeks, maternal blood volume increases by 40–50% above non-pregnant volumes . This, coupled with drop in serum albumin concentration, leads to decreased serum colloid osmotic pressure and hemodilutional anemia. Because of the increased compliance of the right and left ventricles in pregnancy, the pulmonary occlusion and central venous pressures remain fixed . While exact origin of the increased blood volume is not fully understood, the mechanism may be through nitric oxide mediated vasodilatation and increased arginine vasopressin production and mineralocorticoid activity, with water and sodium retention, leading to hypervolemia . The pregnancy induced hypervolemia is thought to provide survival advantage to the pregnant women, protecting her from hemodynamic instability with the blood loss at the time of delivery .

Pacheco (2013)The increase in total body water, blood volume, and capillary hydrostatic pressure increase significantly the volume of distribution of hydrophilic substrates. Clinically, a larger volume of distribution could necessitate a higher initial and maintenance dose of hydrophilic drugs to obtain therapeutic plasma concentrations. Additionally, because of the decrease in serum albumin concentrations and other drug-binding proteins during pregnancy; drugs, that are highly protein bound, may display higher free levels due to decreased protein binding availability, and thus higher bioactivity. For example, if a drug is highly (99%) bound to albumin in non-pregnant patients, a small drop in protein binding to 98% in pregnancy translates into doubling of the drug's active fraction in pregnancy. Digoxin, midazolam, and phenytoin are examples of medications primarily bound to albumin.

Baldwin (2002).Pregnancy is associated with increase in tidal volume by 30–50%, which starts early in the first trimester. While the respiratory rate is not different compared to non-pregnant state, minute ventilation (the product of respiratory rate and tidal volume) is significantly increased, similarly, by 30–50%. These changes are

mainly driven by the increase in progesterone concentrations in pregnancy . In addition, the diaphragm is pushed 4–5 cm upward due to the increased intra-abdominal pressure from the enlarging uterus and fluid third spacing. This leads to bibasilar alveolar collapse, basilar atelectasis, and decreased in both functional residual capacity and total lung capacity decrease by 10–20% . The decrease in functional residual capacity may predispose pregnant patient to hypoxemia during induction of general anesthesia. The vital capacity remains unchanged, as the decreased expiratory reserve volumes are accompanied with increased inspiratory reserve volumes.

Popovich (2013) When evaluating blood gases in pregnancy, it is important to note that the arterial partial pressure of oxygen (PaO_2) is normally increased to 101–105 mmHg and that of carbon dioxide (PaCO_2) decreased to 28–31 mmHg. These changes are mainly driven by the increase in minute ventilation described above. The drop of PaCO_2 in the maternal circulation creates a gradient between the PaCO_2 of the mother and fetus, which allows CO_2 to diffuse freely from the fetus, through the placenta, and into the mother, where it can be eliminated through the maternal lungs . In addition, maternal arterial blood pH is slightly increased to 7.4–7.45 and consistent with mild respiratory alkalosis. This alkalosis is partially corrected by increased renal excretion of bicarbonate, leading to reduced serum bicarbonate level between 18 and 21 meq/L, and reduced buffering capacity . This partially compensated respiratory alkalosis slightly shifts the oxy-hemoglobin dissociation curve rightward, thereby favoring dissociation of oxygen and facilitating its transfer across the placenta, but it also may affect protein binding of some drugs .

Davison (2013) Both renal blood flow and glomerular filtration rate (GFR) increase by 50%, as early as 14 weeks of pregnancy. The mechanisms behind the increase in GFR are probably secondary to vasodilation of concentrations, so that when serum creatinine concentration is above 0.8 mg/dL during pregnancy, it may indicate an underlying renal dysfunction . The increase in renal clearance can have significant increase (20–65%) in the elimination rates of renally cleared medications leading to shorter half-lives. For example, the clearance of lithium, which used to treat bipolar disorder, is doubled during the third trimester of pregnancy compared with the non-pregnant state, leading to sub-therapeutic drug concentration. Other drugs that are

eliminated by the kidneys include ampicillin, cefuroxime, cephradine, cefazolin, piperacillin, atenolol, digoxin, and many others.

Schou (2012) The kidneys are also mainly involved in water and sodium osmoregulation. Vasodilatory prostaglandins, atrial natriuretic factor, and progesterone favor natriuresis; whereas aldosterone and estrogen favor sodium retention. Although elevated GFR leads to additional sodium wasting, the higher level of aldosterone, which reabsorbs sodium in the distal nephron, offsets this wasting. The resulting outcome is one of significant water and sodium retention during pregnancy, leading to cumulative retention of almost a gram of sodium, and a hefty increase in total body water by 6–8 l including up to 1.5 l in plasma volume and 3.5 l in the fetus, placenta, and amniotic fluid. This “dilutional effect” leads to mildly reduced serum sodium (concentration of 135–138 meq/L compared with 135–145 meq/L in non-pregnant women) as well as serum osmolarity (normal value in pregnancy ~280 mOsm/L compared with 286–289 mOsm/L in non-pregnant women). Another consequence of this volume expansion is reduced in peak serum concentrations (C_{max}) of many hydrophilic drugs, particularly if the drug has a relatively small volume of distribution.

Chowienczyz (2011) In pregnancy, the rise in progesterone leads to delayed gastric emptying and prolonged small bowel transit time, by ~30–50%. Increased gastric pressure, caused by delayed emptying as well as compression from the gravid uterus, along with reduced resting muscle tone of the lower esophageal sphincter, sets the stage for gastro-esophageal reflux during pregnancy. In addition, these changes alter bioavailability parameters like C_{max} and time to maximum concentration (T_{max}) of orally administered medications. The decrease in C_{max} and increase in T_{max} are especially concerning for medications that are taken as a single dose, because a rapid onset of action is typically desired for these medication.

Lockitch (2013) The increase in estrogen in pregnancy leads to increase in serum concentrations of cholesterol, ceruloplasmin, thyroid binding globulin, and cortisol binding globulin, fibrinogen and many other clotting factors. Serum alkaline phosphatase is elevated during pregnancy as it is also produced by the placenta, and its levels in pregnant women may be two to four times those of non-pregnant individuals; therefore limiting its clinical utility when liver function or enzymes are assayed. The rest of liver function tests such as serum transaminases (SGOT, SGPT), lactate dehydrogenase, bilirubin, and gamma-glutamyl transferase are not affected

Pritchard (2013) White (WBC) and red blood cell (RBC) counts increase during pregnancy. The first is thought to be secondary to bone marrow granulopoiesis; whereas the 30% increase in RBC mass (250–450 mL) is mainly driven by the increase in erythropoietin production. The higher WBC count can sometimes make diagnosis of infection challenging; however normally the increase in WBC is not associated with significant increase in bands or other immature WBC forms. Despite the increase in RBC mass, and as previously described, plasma volume increases significantly much higher (~45%), which leads to “physiologic anemia” of pregnancy. Anemia usually peaks early in the third trimester (30–32 weeks) and may become clinically significant in patients already anemic (iron deficiency, thalassemia, etc.) at entry to pregnancy. This physiologic hemodilution may provide survival advantage to women during pregnancy and childbirth, since the less viscous blood improves uterine and intervillous perfusion, while the increased red cell mass, coupled with increased uterine blood flow, optimizes oxygen transport to the fetus, and at the same time the blood lost during delivery will be more dilute. The increase in RBC mass is accompanied by increased in maternal demand of iron by an additional 500 mg during pregnancy. This is coupled with an additional 300 mg of iron that is transferred to the fetus and 200 mg that is required for normal daily iron losses, making the total iron requirement in pregnancy around 1 g

Hehhgren (2013).Pregnancy is a hypercoagulable state secondary to blood stasis as well as changes in the coagulation and fibrinolytic pathway such as increased plasma levels of clotting factors (VII,VIII,IX,X,XII), fibrinogen, and von Willebrand factor. Fibrinogen increases starting in the first trimester and peaks during the third trimester in anticipation of delivery. Prothrombin and factor V levels remain the same during pregnancy. Whereas, protein S decreases in pregnancy, protein C does not usually change and thus can be assayed if needed in pregnancy. Free antigen levels of the protein S above 30% in the second trimester and 24% in the third trimester are considered normal during pregnancy . Anti-thrombin III levels do not change, however, plasminogen activator levels are decreased and those of plasminogen activator inhibitor (PAI-1) levels increased by 2–3 fold, leading to suppressed fibrinolytic state in pregnancy. Platelet function and routine coagulation screen panels remain normal. This hypercoagulable state may offer a survival advantage by minimizing blood loss after delivery, but it also predisposes pregnant women to higher risks for thromboembolism.

Alexander (2012) Plasma iodide concentration decreases in pregnancy because of fetal use and increase in maternal clearance of iodide. This predisposes the thyroid gland to increase in size and volume in almost 15% of women. In addition to anatomic changes, the thyroid gland increases production of thyroid hormones during pregnancy. This is due to the up-regulation of thyroid binding globulin, which is the major thyroid hormone binding protein, by almost 150% from a pre-pregnancy concentration of 15–16 mg/L to 30–40 mg/L in mid-gestation. This massive increase is driven by the hyper-estrogenic milieu in pregnancy and reduced hepatic clearance. The net result is increase in total tetra-iodothyronin and tri-iodothyronin hormones (TT4 and TT3) in pregnancy. Despite the increase in total T4 and T3, the free forms of the hormones (fT4 and fT3) remain relatively stable or slightly decreased but remain within normal values and these patients are clinically euthyroid. The increased thyroid hormones production takes place mostly in the first half of gestation, plateauing around 20 weeks until term. Clinically, due to these changes, the use of total T4, total T3 and resin tri-iodothyronine uptake is not recommended to monitor thyroid hormone status in pregnancy as they will be increased (TT4, TT3) and decreased (rT3U), respectively. For patients with hypothyroidism and who require levothyroxine replacement in pregnancy, it is recommended that they increase their levothyroxine dose by 30% early in pregnancy, be monitored during pregnancy, and to decrease the dose in the postpartum period

Glinoe (2013).Thyroid stimulating hormone (TSH) decreases during the first half of pregnancy due to negative feedback from peripheral T3 and T4 secondary to thyroid gland stimulation by human chorionic gonadotropin (hCG). During the first half of pregnancy, a normal value of TSH is between 0.5–2.5 mIU/L (as compared to an upper limit of normal value for TSH of 5 mIU/L in the non-pregnant state). Other factors that affect thyroid hormones metabolism and levels in pregnancy include: (1) the increase in maternal renal iodine excretion (secondary to increase in GFR), (2) the higher maternal metabolic demands and rate during pregnancy, (3) the thyrotropic action of hCG which shares a similar α subunit with the TSH receptor and has a weak thyroid stimulating activity, (4) the increase in thyroid hormones transplacental transport to the fetus early in pregnancy, and (5) the increase in activity of placental type III 5-deiodinase (the enzymes that converts T4 to the inactive reverse T3).

CONCEPTUAL FRAMEWORK:

Conceptual frame work is the conceptual underpinning of the study. It is a group of concepts and a set of proportions that spells out the relationship between them.

The study was aimed to assess the effectiveness of structure teaching program on knowledge regarding Antenatal care among first and second trimester among Primigravida mothers in rural primary health center in Sakkayanayakkanoor at Dindugul. The conceptual frame work for this study was derived from the concepts of Shufeldt's programme evaluation model. The model includes: context evaluation, input evaluation, Process evaluation and product evaluation.

In this study context refers to selected factors of Primigravida mothers such as age, gestational weeks, education, occupation, type of family, bread winner of the family, spouse education income, source of information of Primi mothers.

Input evaluation

In this study it refers to care givers, structured teaching program has been taken using power point presentation among Primigravida mothers.

Process evaluation

Evaluates the implementing process includes the interaction between the clients and care givers. Structured teaching programme for about 30 minutes.

Product evaluation

In this study it refers to knowledge before and after the structured teaching programme. The significant increase in knowledge was considered effective.

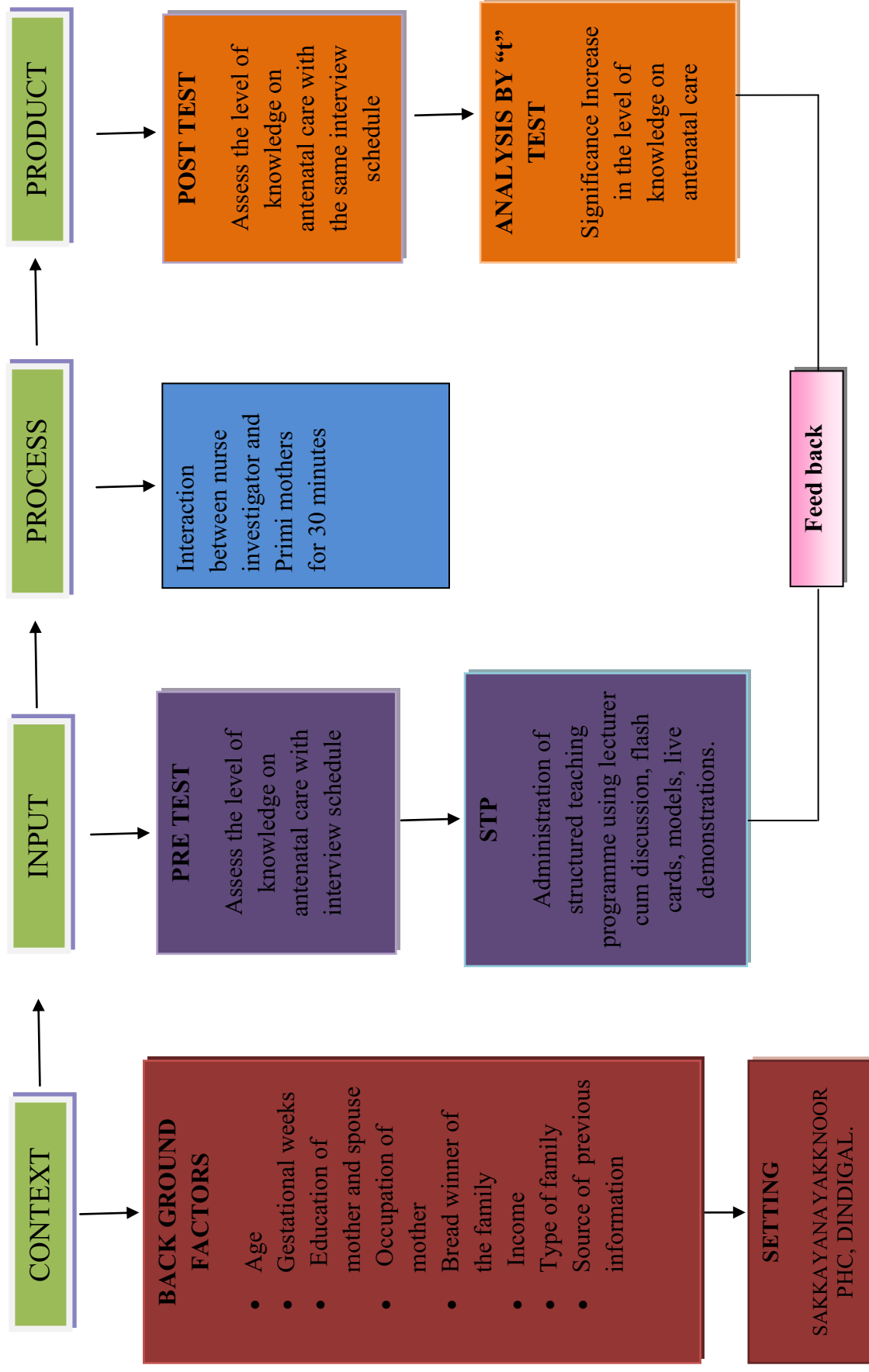
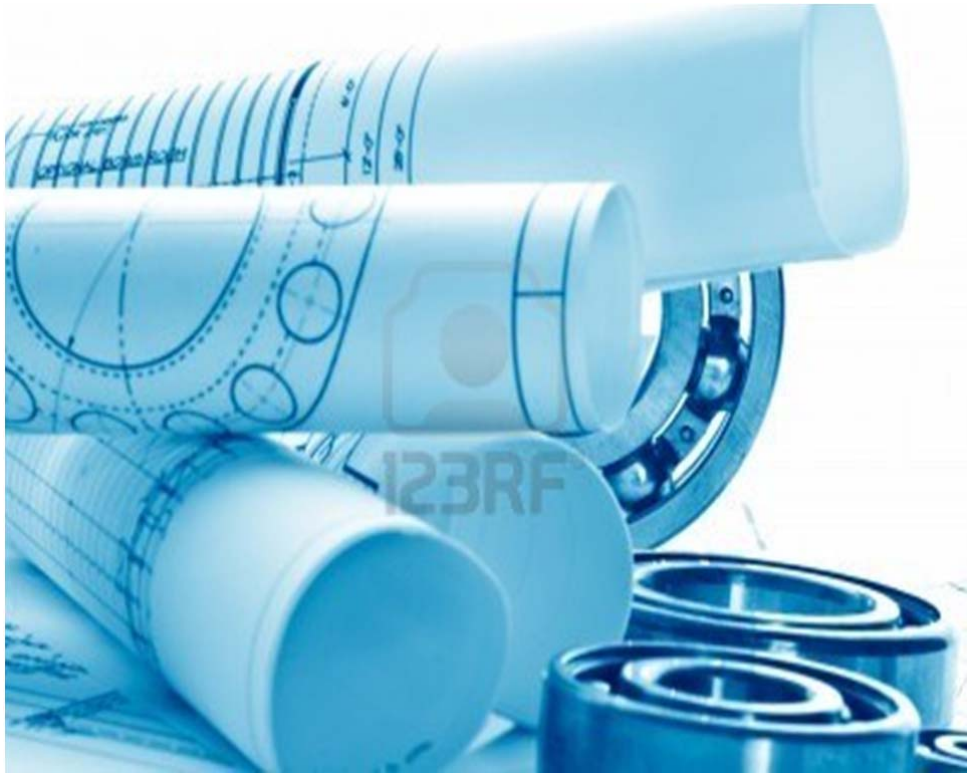


FIG.1: CONCEPTUAL FRAME WORK BASED ON SHUFFLE BEAM PROGRAMME EVALUATION MODEL



METHODOLOGY

CHAPTER - III

METHODOLOGY

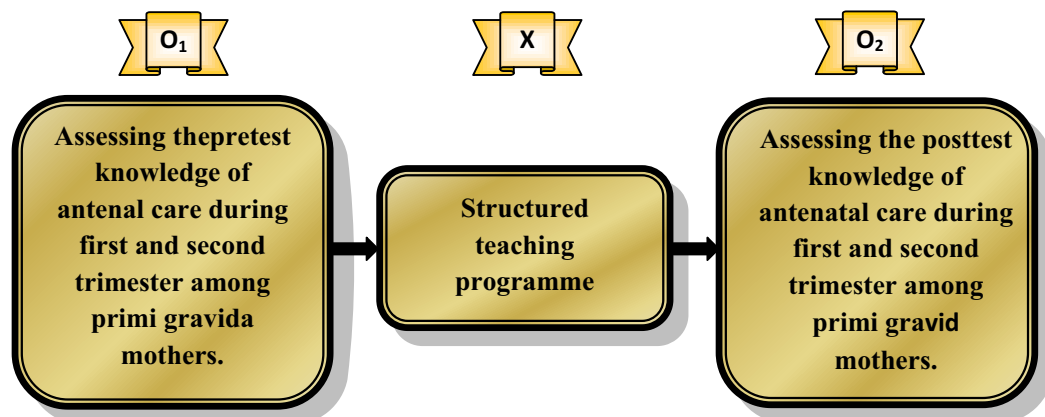
Methodology is the most important phase of the study. The methodology of research indicates the general pattern of organizing the procedures for gathering valid and reliable data for investigation. This chapter provides a brief description of method adopted by the investigator in this study. This includes the research design, setting of the study, population, sample, and sample size, sampling technique, criteria for sample selection, description of the tool, pilot study, data collection procedure, plan for data analysis and protection of human rights. .

RESEARCH APPROACH

Quantitative research approach was used for the present study. According to Polit and Beck (2010) Quasi experimental research design refers to a design for an intervention study in which subjects are non randomly assigned to treatment condition, also called a non randomized trial, or a controlled trial without randomization. The present study is aimed at evaluate the effectiveness of structured teaching programme on knowledge regarding antenatal care among Primigravida mothers.

RESEARCH DESIGN

The research design selected for this study was quasi experimental one group pre test and post test design. In this study to assess the effectiveness of structured teaching program regarding knowledge on antenatal care mothers among Primigravida mothers in selected rural primary health center sakkayanayakknoor at ,Dindigal



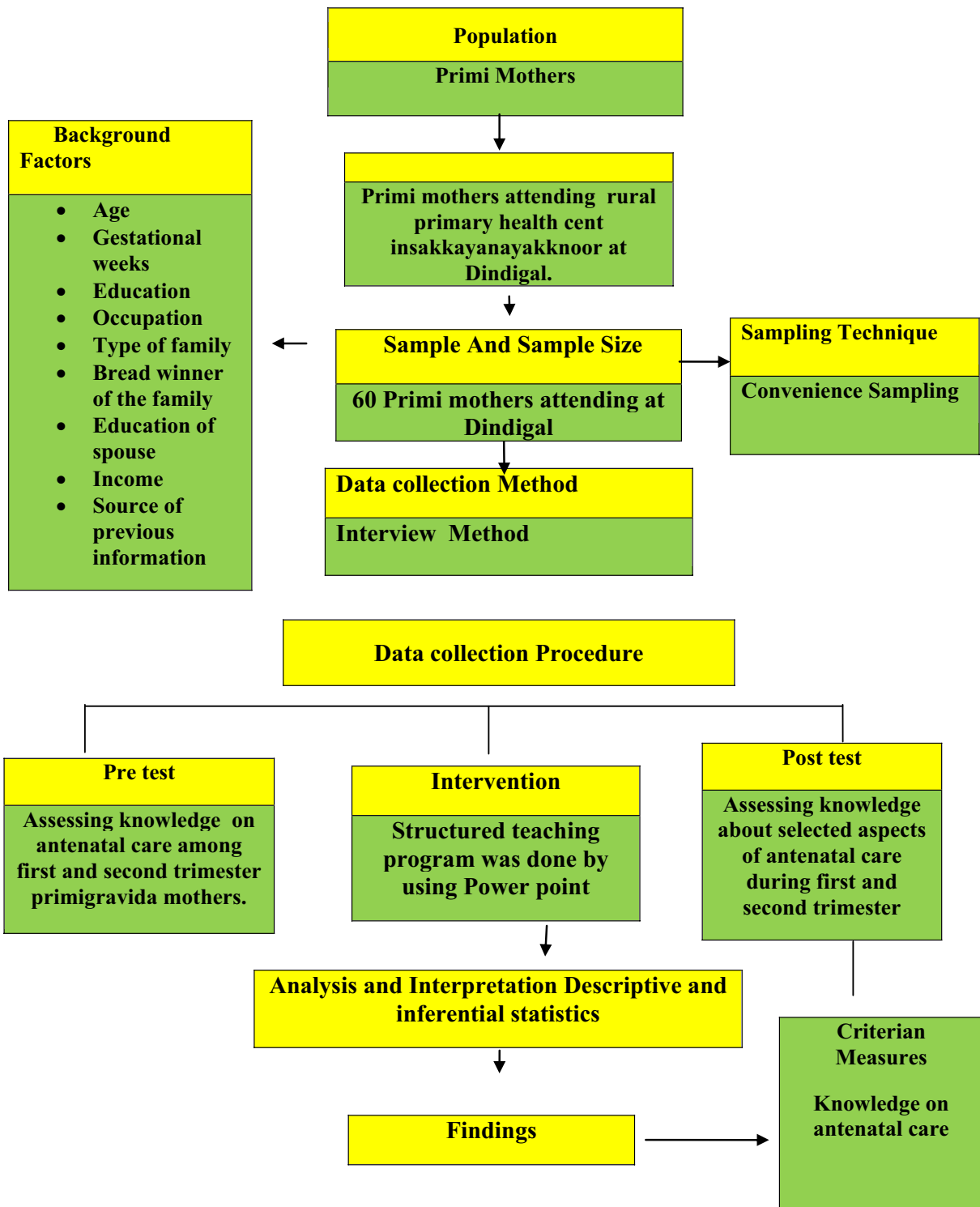


FIG.SCHEMATIC PRESENTATION OF RESEARCH DESIGN VARIABLES

VARIABLES

The three categories of variables discussed in the present study were,

Independent variable	:	Structured teaching program
Dependent variable	:	Antenatal care
Associate variables	:	age, gestational weeks, education, occupation, type of family, bread winner of the family, spouse education income, source of information of Primi mothers.

SETTING OF THE STUDY

The selection of setting was done on the basis of feasibility of conducting the study, availability of the subjects and permission from authorities. The study was conducted in the rural primary health center sakkayanayakknoor at Dindigal.

SAMPLE AND SAMPLE SIZE

The Samples for this study were Primigravida mothers with first and second trimester who fulfilled the inclusion criteria. The sample size of the study was 60.

SAMPLE POPULATION

The population for this study was all Primigravida mothers with Third trimester who were attending the antenatal clinic in Sakkayanayakknoor Rural PHC.

SAMPLE

A sample is the subject of the population selected to participate in the research study. In this study primigravida mothers who were attending the antenatal clinic in the rural primary health center at dindigal were the study samples. The sample size for this study was arbitrarily decided to be 30

SAMPLING TECHNIQUE

Sampling is an important step in the research process. It is the process of selecting representatives units of subset of a population of the study in a research. Convenience sampling technique was used in the study.

SAMPLING CRITERIA

In sampling criteria the researcher specifies the characters the population under the study by detailing the inclusion and exclusion criteria. The inclusion criteria characterizes that each sample elements must possess to be included in the sample. Exclusion criteria are characteristics that could confound and contaminate the result of the study; therefore such participants are excluded from the study.

Inclusion criteria

- Primi mothers with first and second trimester who were attending the rural primary health center sakkayanayakkanoor at Dindigal.
- Mothers who were willing to participate in this study.
- Primigravida mothers were in first and second trimester.

Exclusion criteria

- Multi Para mothers
- Mothers who were not available during the study
- Mothers those who understand tamil.

DEVELOPMENT OF TOOL

The tool is a written device that a researcher uses to collect the data. The investigator used an Interview schedule for assessing the knowledge regarding selected aspects of Antenatal care during first and second trimester among primigravida mothers and to collect back ground factors.

RESEARCH TOOL AND TECHNIQUES

The study tool considered of two section

Section I : background factors of primi mothers

Section II : interview schedule to assess the knowledge regarding antenatal care.

DESCRIPTION OF THE TOOL

The study tool considered of two sections,

Section I: Use either Back ground factors or demographic factors

Section II: Interview schedule to assess the Knowledge regarding Antenatal care during first and second trimester.

SECTION –I: USE EITHER BACK ROUND FACTORS OR DEMOGRAPHIC FACTORS

Demographic data consists of age, gestation weeks, education, occupation, and type of family, bread winner of the family, education of spouse, income, and source of information.

SECTION-II: TO ASSESS THE KNOWLEDGE REGARDING ANTENATAL CARE

The tool consisting of 30 questions. The tool used to assess the knowledge on antenatal care among first and second trimester primigravida mothers.

VALIDITY OF THE TOOL

The entire tool was validated by Medical experts and Nursing experts. Experts were requested to judge the tool for its clarity, relatedness, sequence, meaningfulness and content. Few modifications were made as per suggestions given by the experts. the Tool was developed in English and it was translated into Tamil. Retranslation was done and language validity was established.

RELIABILITY

The stability of an instrument refers to the instrument's reliability to produce the same result with repeated testing. Inter-rater reliability was done. The subjects were selected by Purposive sampling. Six Persons were tested by using the interview scedule. Correlation coefficient was found $r=0.79$. The tool was found highly reliable.

PILOT STUDY REPORT

Pilot study was conducted at primary health center in sakkayanayakknoor at , Dindigal ,for a period of one week. Permission was obtained from the Deputy Director of health services. A quasi experimental design was adapted to assess the level of knowledge on selected aspects of Antenatal care the pilot study was conducted with 10% of the total population. Participants who met the eligible criteria were selected by convenience sampling technique. The purpose of the study was explained and written consent was obtained from each patient. Study was assessed by using interview method. The duration of data collection for each participant was 30 minutes. No problem were faced during pilot study.

TECHNIQUE OF DATA ANALYSIS

Data analysis were done with the help of quasi experimental desing and inferential statistics.

SAMPLE SIZE CALCULATION

Based on pilot study sample size was calculated and 60 samples were taken for the main study.

DATA COLLECTION PROCEDURE

Written permission was obtained from the Deputy Director of Health services, Dindigal. Primi Mothers who fulfilled the inclusion criteria were selected by using Purposive sampling method. The researcher introduced herself to the Primi mothers and developed good rapport with them for their co- operation. The researcher assured the participants for the confidentiality of their responses.

The purpose of the study was explained to every sample, so as to get their full co-operation. Adequate privacy was provided. Pre test has been done with the help of interview schedule. A class has been taken as a Intervention with the help of power point. After that finally post test has been done.

PLAN FOR DATA ANALYSIS

In the present study the data collected were grouped and analyzed, using SPSS, version 16 software. The level of significance was 0.05 level.

The data were analyzed as follows:

- The data were organized in master excel sheet
- Back ground variables of Primigravida mothers were analyzed using frequency percentage distribution
- Mean score and “t” test analyzed data on knowledge regarding Antenatal care during first and second trimester among Primigravida mothers.
- The association between in post test knowledge score and relation to the back ground factors were analyzed by using linear regression.

ETHICAL CONSIDERATION

The research and ethical committee of the institution approved the study objectives, intervention and data collection procedures. Informed consent was obtained from the mothers by orally. The mothers had the freedom to leave the study at her will without any reason. Due permission from authorities were obtained. Explanation regarding the purpose of the structured teaching program was given to the Primi mothers involved in the study. Thus the ethical issues were ensured in this study.

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

Analysis and interpretation of data of this study was done by description and inferential statistics. Analysis was done by using SPSS, version 16. A probability value of less than 0.05 was considered to be significant.

This chapter deals with analysis and interpretation of data collected on knowledge regarding Antenatal care among first and second trimester primigravida mothers.

THE OBJECTIVES OF THE STUDY

- To assess the level of knowledge regarding antenatal care among primigravida mothers
- To assess the level of knowledge before and after structured teaching programme among primigravida mothers
- To test the association between post test knowledge score and selected background factors among primigravida mothers.

Section I : Data on background factors of the primigravida mothers.

Section II : Data on knowledge on antenatal care before and after structured Teaching program among primigravida mothers.

Section III : Data on association between the post test knowledge score and factors Among primigravida mothers.

Section I: Data on background factors of first and second trimester among primigravida mothers.

TABLE – I

FREQUENCY AND PERCENTAGE DISTRIBUTION OF PRIMI

MOTHERS REGARDING BACK GROUND FACTORS

N=60

S.No	BACKGROUND FACTORS	FREQUENCY	PERCENTAGE(%)
1	AGE		
	a) 18 – 20 years	9	15.0%
	b) 21 – 25 years	48	80.0%
	c) 30 – Above	3	5.0%
2	Bread winner of the family		
	a) Father in Law	4	6.7%
	b) Husband	55	91.7%
	c) Wife	1	1.7%
3	Education of spouse:		
	a) Illiterate	00	00%
	b) Primary school	5	8.3%
	c) Secondary school	55	91.7%
	d) Any Degree	00	00%
4	Income:		
	a) >5000 / month	7	11.7%
	b) 5000 – 10000 / month	50	83.3%
	c) 10,000 above / month.	3	5.0%

Table I Shows that frequency and percentage distribution on demographic variables among Primigravida mothers.

Regarding age majority of antenatal mothers 48(80%) belongs to 21-25 years and least 3(5%) belongs to the age group above 30 years

Regarding bread winner of family majority of 55(91.7%) belongs to husband and least 1(1.7%) belongs to the wife.

Regarding spouses education of majority of 55(91.7%) belongs to secondary school and least 5(8.3%) belongs to the primary school.

Regarding income majority of 50(83.3%) belongs to 5000-10000/ month and least 3(5.0%) belongs to the 10000 and above.

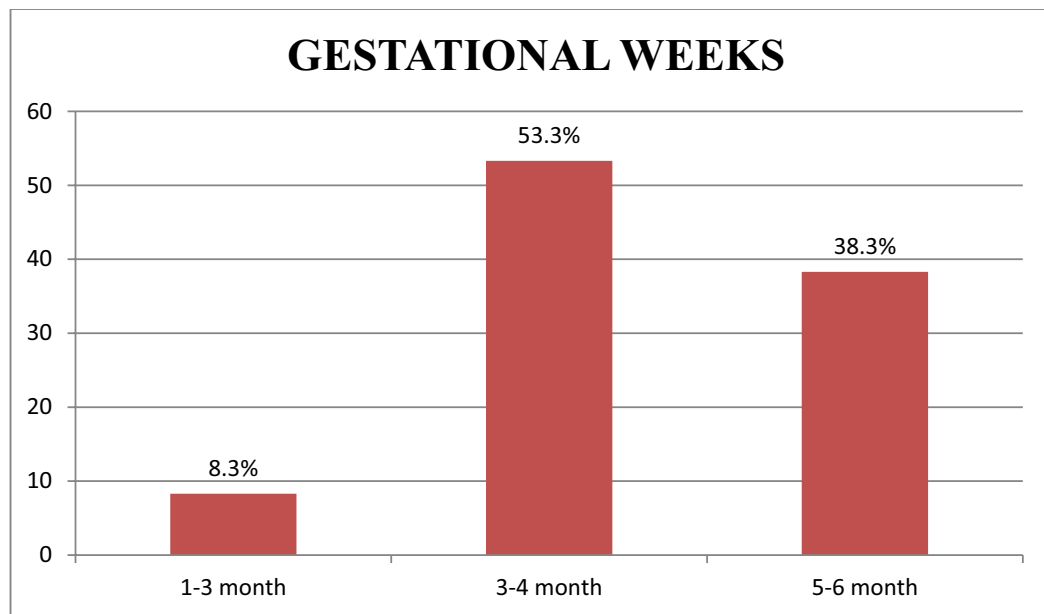


Figure 3 : Frequency and percentage distribution of gestational weeks

Figure 3 , Reveals the frequency and percentage distribution of gestational weeks Regarding gestational weeks, 1-3 month5(8.3%) were 3-4 months, 32(53.3%) were 5-6 months, 23(38.3%) .Inference drawn from the table is tha majority (53.3) of the 3-4 month.

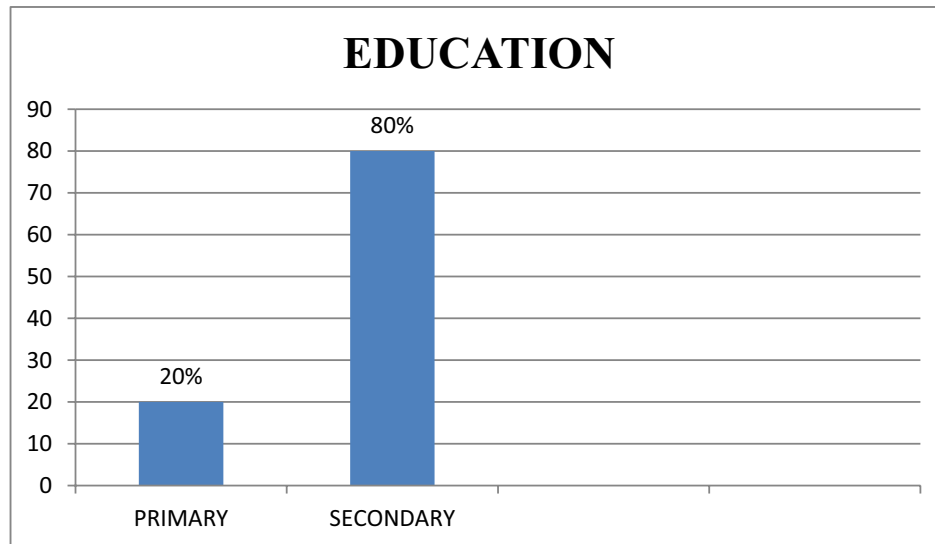


Figure 4 : Frequency and percentage distribution of education

Figure 4, Frequency and percentage distribution of education Regarding education, 0(00%) were illiterate, 12(20%) were primary school, 48(80.00%) were secondary school and 0(00%) were any degree .Inference drawn from the table is that majority (80%) of the educational status in the secondary school.

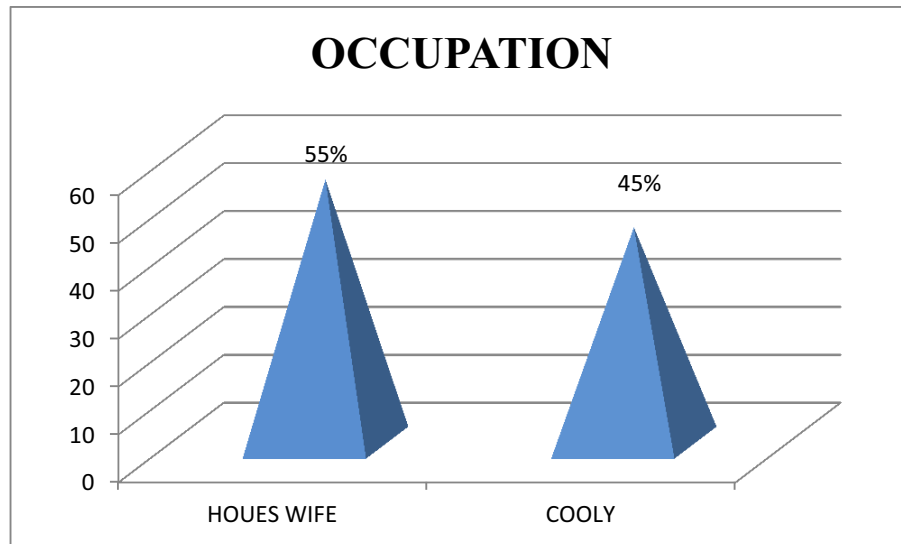


Figure 5 : Frequency and percentage distribution of occupation

Figure 5 : Frequency and percentage distribution of occupation, Regarding occupation, 33(55.0%) were house wife, 27(45.0%) were Cooley, 0(00%) was professional job or office work. Inference drawn from the table is that majority (55%) of the living in house wife.

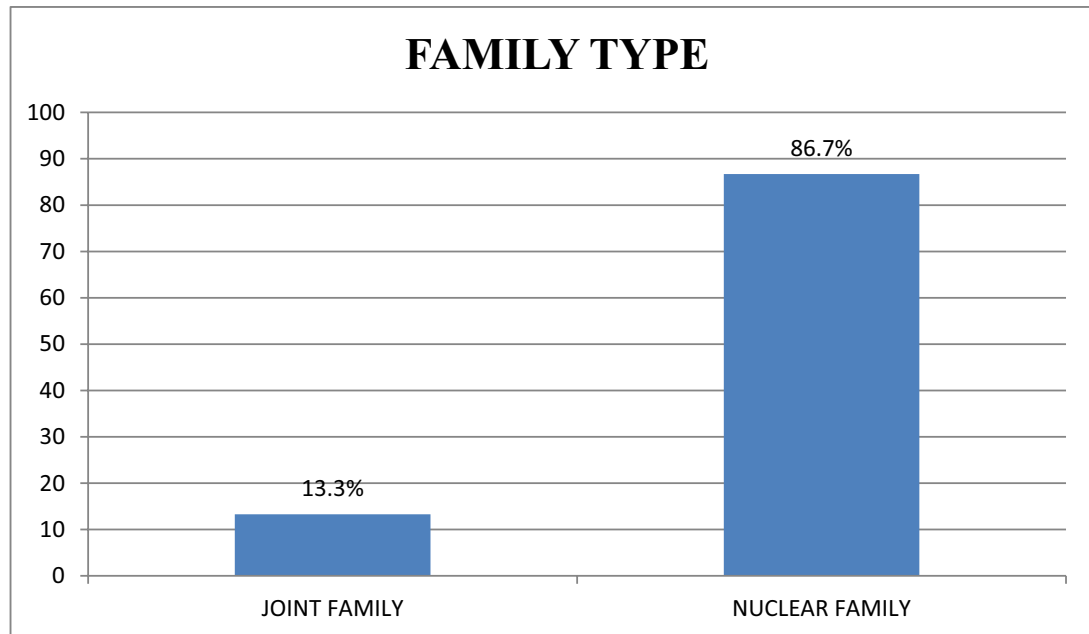


Figure 6 : Frequency and percentage distribution of Type of family

Figure 6 : Frequency and percentage distribution of Type of family, Regarding type of family, 52(86.7%) were belong to the nuclear family, 8(13.3%) of them belong to the was joint family. Inference drawn from the table is that majority (86.7%) of the living in nuclear family.

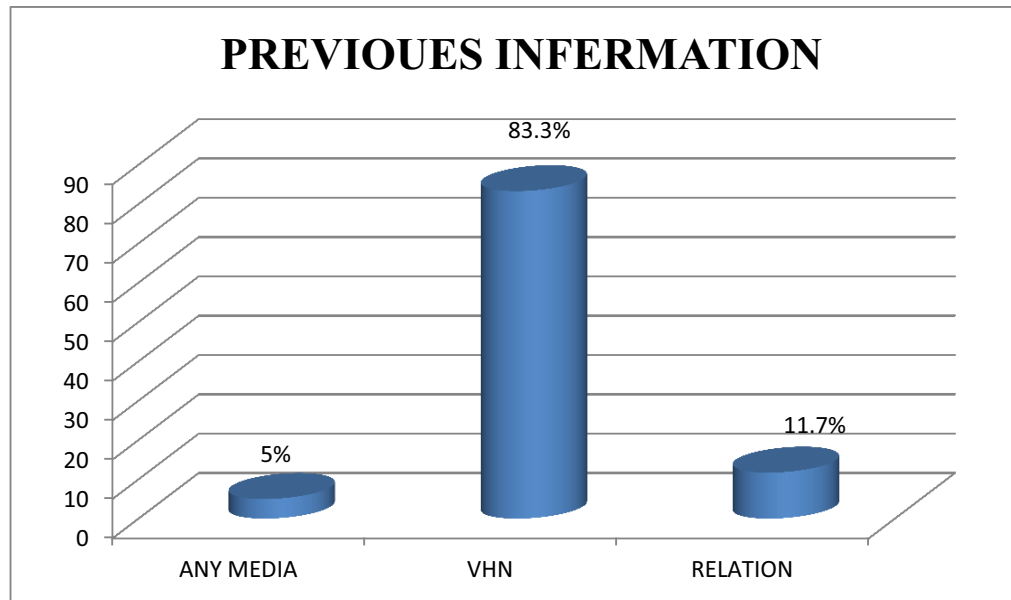


Figure 7: Frequency and percentage distribution of Source of previous information

Figure 7: Frequency and percentage distribution of Source of previous information, regarding source of information, 3(5.00%) were any medias, 50(83.3%) were through VHN, 7(11.7%) were any relatives, 0(0%) were others. Inference drawn from the table is that majority (83.3%) of the previous information collecting from the village health nurse.

Section II: Data on knowledge pre test and post test after the Structured teaching program among Primi mothers

For the purpose of this study the following null hypothesis was stated.

H₀₁ : There will be no significant difference on knowledge score the before and After the structured teaching programme.

H₀₂ : There will be no significant difference between the post test Knowledge score and the selected among primigravida mothers

TABLE II
MEAN, SD, MEAN DIFFERENCE AND “t” VALUE ON PRE TEST AND OVERALL POST TEST ON KNOWLEDGE AMONG PRIMIGRAVIDA MOTHERS.

N=60

KNOWLEDGE SCORE ON ANTENATAL CARE	MEAN	STANDARD DEVIATION (SD)	MEAN DIFFERENCE	CALCULATED VALUE “t”	P(>0.05)
PRETEST	8.70	3.679	19.883	42.300	0.00 significant
POST TEST	28.58	1.239			

Table II: shows that mean, SD, mean difference and “t” value on pre test and over all post test on knowledge among Primi mothers.

t = 1.645 at 58 df at 5% significant

The obtained overall post test mean 28.58(SD = 1.239) was greater than the pre test mean 8.70(SD = 3.679)

The obtained mean difference was 19.883 and “t” value $t = 42.300$ ($P = 0.00$) was significant.

It inferred that knowledge have significantly increased after the structured teaching program among Primi mothers. It was found to be very effective.

SECTION III: DATA ON ASSOCIATION BETWEEN THE MEAN DIFFERENCE OF POST TEST KNOWLEDGE ON ANTENATAL CARE DURING FIRST AND SECOND TRIMESTER AND BACK GROUND FACTORS AMONG PRIMIGRAVIDA MOTHERS

For the purpose of this study the following null hypothesis was stated.

- HI : There will be no significant difference on knowledge the before and after the structured teaching programe
- H2 : There will be no significant difference between the posttest knowledge score and the selected background factors primigravida mothers

TABLE:III

**LINEAR REGRESSION REGARDING KNOWLEDGE ON
ANTENATAL CARE AND BACKGROUND FACTORS AMONG FIRST AND
SECOND TRIMESTER PRIMIGRAVIDA MOTHERS**

S.NO	VARIABLES	STANDARDIZED COEFFICIENTS(BETA)	t	P(>0.05)	SIG
1	AGE	0.092	0.263	0.00	S
2	GESTATIONAL WEEKS	0.220	0.761	0.450	NS
3	EDUCATION	0.341	0.872	0.387	NS
4	OCCUPATION	0.288	0.908	0.368	NS
5	TYPE OF FAMILY	1.127	1.824	0.074	NS
6	BREADWINNE R OF FAMILY	1.074	1.765	0.084	NS
7	SPOUSE EDUCATION	0.097	0.158	0.875	NS
8	INCOME	0.027	0.056	0.955	NS
9	SOURCE OF INFORMATION	0.387	0.896	0.374	NS

S- significant , NS- Non significant

Shows that the standized beta indicates that the relative contribution of there demographic variables in predicting antenatal care based on the percentage of prediction of antenatal care. Age (09.2%), gestational weeks (22.0%), education

(34.1%) occupation (28.8%). Type of family (11.27%), breadwinner of family (10.74%) spouse education (09.7%), income (02.7%), source of information (38.7%), thus, there demographic variables influence on antenatal care.



DISCUSSION

CHAPTER V

DISCUSSION

This chapter deal with the discussion of the study with appropriate literature, statistical analysis and the findings of the study based on the study objectives.

The aim of the study was to assess the knowledge on antenatal care during first and second trimester among Primigravida mothers who were attending the antenatal clinic in Antenatal care during f rural primary health center Dindigal.

The main study was conducted from sample numbering of 30 among Primigravida mothers who were attending the antenatal clinic in rural primary health center, Dindigal.

The knowledge on Antenatal care among first and second trimester among Primigravida mothers was assessed by tool.

HYPOTHESES

H1: There will be significant difference on knowledge before and after the structured teaching programe

H2: There will be significant difference between the post test knowledge score and the selected background among Primigravida mothers.

The first objective of the study is to assess the level of knowledge of Antenatal care during first and second trimester among Primigravida mothers who were attending the antenatal clinic in Antenatal care rural primary health center, Dindigal.

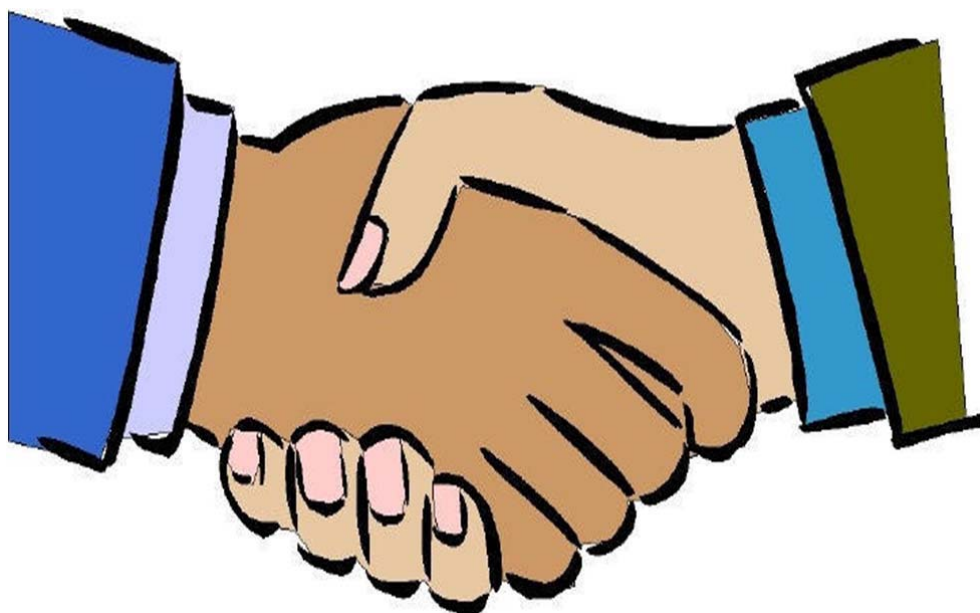
Table I Shows that frequency distribution and percentage on background factors among Primi mothers aged between 18- 30 years and above. Regarding age, 9(15%) were between the age group of 18-20 yrs, 48(80%) were between the age group of 21-25 yrs, and 3(5%) were between the age group of 25years and above. Regarding gestational weeks, 5(8.3%) were 1-3 month , 32(53.3%) were 4-5 months, 23(38.3%) were 5-6months. Regarding education, 0(0%) were illiterate, 18(30%) were primary school, 48(80%) were higher secondary and 0(0%) were any degree. Regarding occupation, 33(55%) were house wife, 27(45%) were Cooley, 0(0%) was office work or . Regarding type of family, 8(13.3%) were nuclear family,52(86.7%)

was joint family. Regarding bread winner of the family, 4(6.7%) were father in law, 55(91.7%) were husband, 1(1.7%) was wife. Regarding spouse education, 0(0%) were illiterate, 5(8.3%) were primary school, 55(91.7%) higher secondary, 0(0%) was any degree.

Regarding Income, 7(11.7%) were 5000 / month, 50(83.3%) were 5000 – 10000/ month, 3(5%) were 10,000 above/ month. Regarding source of information, 3(5%) were any medias, 50(83.3%) were through VHN, 7(11.7%) were any relatives, 0(0%) were others.

Table II: shows that mean, SD, mean difference and “t” value on pre test score and over all post test score on knowledge among Primi mothers. The obtained overall post test mean 8.70(SD = 3.679) was less than the pre test mean 28.58(SD = 1.239). The obtained mean difference was 19.883 and “t” value $t = 42.300$ ($P = 0.00$) was significant.

Table III: reveals the standardized co-effecicient and “t” value regarding mean difference of post test knowledge on antenatal care and selected back ground factors among Primi mothers based on linear regression. The obtained “t” values $t = -0.263(0.092)$, $t = 0.761(0.220)$, $t = -0.872(0.341)$, $t = 0.908(0.288)$, $t = 1.824(1.127)$, $t = 1.765(1.074)$, $t = -0.158(0.097)$, $t = -0.056(0.027)$ reported for age, gestational weeks, education, occupation, type of family, bread winner of the family, spouse education, income, source of education respectively were not significant in relation to structured teaching program.



CONCLUSION

CHAPTER VI

CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS.

The essence of any research project is based on study findings, limitations, interpretation of the result and recommendations that incorporate the study implication. It also gives meaning to the results obtained in this study.

SUMMARY

The prime aim of the study was to assess the effectiveness of structured teaching program on Antenatal care during first and second trimester among primigravida mothers in rural primary health center in sakkayanayakknoor at Dindigal.

The objectives of the study were,

- To assess the level of knowledge of Antenatal care among primigravida mothers.
- To assess the post test level of knowledge before and after structured teaching programe among primigravida mothers.
- To test the association between pos test knowledge score selected background factors among primigravida mothers.

The study attempted to examine the following research hypothesis.

H1: There will be significant difference between the before and after the structured teaching programe.

H2: There will be the significant difference between the post test knowledge score and the selected demographic variables among primigravida mothers.

The major assumption of the study include the mothers would co-operate with the investigator and every mother was unique.

The review of literature helped the investigator to develop the conceptual frame work, tool, and develop intervention of structure teaching program literature review was done for the present study and presented in the following headings.

Studies related to Antenatal care, studies related to Antenatal mothers, studies related to family planning.

The conceptual frame work adopted for the present study was based on input throughput output model.

The research approach for the study was evaluated in nature. The present study was a one group pre test post test design. Independent variable in this study was structured teaching program. Dependent variables for this study were primi mothers. Associative variables for this study were age, gestational weeks, education, occupation, type of family, bread winner of the family, spouse education, income, source of information.

The tool developed and used for data collection was an interview schedule to assess the knowledge on Antenatal care during first and second trimester. The structured teaching program was developed on the basis of related literature. The content validity was found reliable and feasible. The reliability of the tool was established by inter rater reliability, correlation was found high, $r= 0.79$. The pilot study was conducted rural primary health center in sakkayanayakknoor at dindigal and study was found feasible.

The main study was conducted in rural primary health center in sakkayanayakknoor at dindigal. Convenience sampling technique was used to select the samples. Pre test was done to assess the knowledge on Antenatal care during first and second trimester. The intervention on structured teaching program was administered; Post test was done to assess the knowledge on antenatal care during first and second trimester. The data gathered were analyzed using SPSS (version 16) software at the level of significance based on the study objectives.

MAJOR FINDINGS

The findings of the study are presented under the following headings based on the objective of the study.

- 1) Objective 1: To assess the level of knowledge of Antenatal care during first and second trimester among primigravida mothers.

There was a significant increase in mean post test score after the structured teaching program among primigravida mothers $t = 42.300(P = 0.05)$.

- 2) Objective 2: To find out the association between the post test knowledge score and the selected demographic variables among primi mothers.

The obtained “t” values regarding post test score and selected factors such as age, gestational weeks, education, occupation, type of family, bread winner of the family, spouse education, income, source of information ($P > 0.05$) were not significant.

The obtained $t = 0.263$ regarding post test score and age of primigravida mother was significant. Age made significant difference in mean difference knowledge among primigravida mothers.

Selected factors such as age, education, occupation, type of family, bread winner of the family, spouse education, income, source of information, did make no difference in the mean difference on post test score among primi mothers.

IMPLICATIONS

The study had implications, guidelines and suggestions for nursing practice, nursing education and nursing research.

Implications for Nursing Practice

- Structured teaching program is an effective measure to increase the knowledge. Nurse can use the structured teaching program as an effective measure to increase the knowledge.

NURSING EDUCATION

- Structured teaching program on Antenatal care during first and second trimester among Primigravida mothers can be brought in detail in nursing curriculum from undergraduate level.

NURSING RESEARH:

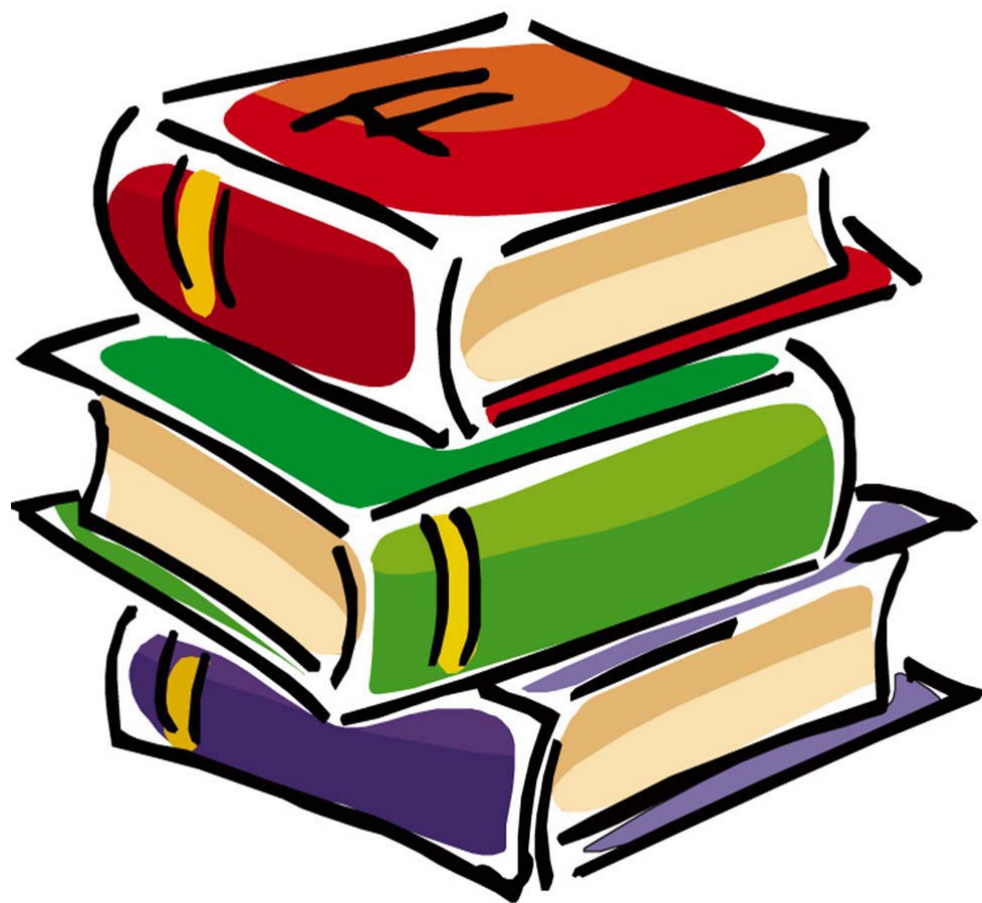
- The study will be valuable reference for further research.
- The findings of the study would help to expand the scientific body of professional knowledge up on which further research can be conducted.
- Structure teaching program can be used as a specific nursing intervention.

RECOMMENDATIONS:

- A similar study can be conducted in large scale.
- Comparative study can be done to assess the effectiveness of Structured Teaching Program and video Teaching Program on knowledge regarding Antenatal care during first and second trimester primigravida mothers.

CONCLUSION

Structured teaching program significantly increases the knowledge on antenatal care among first and second trimester primigravida mother. So in future nurses can prepare an effective structured teaching program to reduce the maternal mortality rate.



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BIBLIOGRAPHY

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APPENDIX

APPENDIX –I

LETTER SEEKING PERMISSION FOR CONTENT VALIDITY

From,

301323052

II year M.sc nursing,

Jainee College of nursing,

Aathupatti pirivu,

Dindigal.

To,

Through,

The principal,

Jainee College of nursing,

Aathupatti pirivu,

Dindigal.

Respected Madam,

Sub: Letter requesting consent to validate the tool.

I am 301323052, II year M.Sc nursing student of Jainee college of Nursing Dindugul, under the Tamil Nadu Dr. M.G.R Medical University, Chennai.

As a partial fulfillment of M.Sc nursing program, I am conducting **“A experimental study to assess the effectiveness structure teaching program on knowledge regarding antenatal care during first and second trimester among primigravida mothers rural primary health center in sakkayanayakkanoor at dindigal district.**

Here I am sending the tool for content validity for your expert opinion. I humbly request yourself to spare a little of your valuable time for me which I remain ever grateful to you. I would be very kind of you to return the same under signed at the earliest.

Thanking you

Place:

Yours sincerely,

Date:

APPENDIX – II

LIST OF EXPERTS

1. Dr. Kavitha, MBBS,DGO,
Director,
Malar Hospital,
Dindigal.
2. Dr. RAJA NALINI ,MD, DGO
Director
Velan Hospital,
Madurai.
3. Dr. THERESA, MBBS, DGO.
Director,
Thembavani hospital,
Madurai.
4. Ms. Meera.,M.Sc(Nursing),
OBG department
Vice Principal,
Jainee College of Nursing,
Dindigal.
5. Mrs.Kavitha.,M.Sc(Nursing),
OBG department
Reader,
Jainee College of Nursing
Dindigal.

APPENDIX – III

PERMISSION LETTER

From,

301323052

II year M.sc nursing,

Jainee College of nursing,

Aathupatti pirivu,

Dindigal.

To,

Through,

The principal,

Jainee College of nursing,

Aathupatti pirivu,

Dindigal.

Respected madam,

Sub: Seeking permission to conduct the research study-regarding

I am 301323052, II year M.Sc nursing student of Jainee college of Nursing Dindigal, under the Tamil Nadu Dr. M.G.R Medical University, Chennai. As a partial fulfillment of university requirement for a award of Master of science in Nursing degree, I am conducting **“A quazi experimental study to assess the effectiveness of structure teaching programe on knowledge regarding antenatal care during first and second trimester among primigravida mothers rural primary health center in sakkayanayakkanoor at dindigal.”** I would like to conduct the research in upgraded primary health center sakkayanayakkanoor, Dindugul. Please grant me permission for the same.

Thanking you

Place:

Yours sincerely,

Date:

(301323052)

APPENDIX – IV

CONTENT VALIDATED CERIFICATE

I hereby certify that I have validated the tool of 301323052M.Sc nursing II year, student who is undertaking **“A quazi experimental study to assess the effectiveness of structured teaching program on knowledge regarding Antenatal care during first and second trimester among primigrada mother in rural primary health center in sakkayanayakkanoor at Dindigal”**.

Place:

Date:

Signature of the Expert,

Designation.

INFORMED CONSENT

I am giving my informed consent to participate in the research study to assess the problems faced by antenatal care during first and second trimester among primigravida mothers rural PHC in sakkayanayakknoor, at Dindigal.

I have been informed that my participation is entirely volunteer. I will not refuse to answer or not participate any point of time during the study. I have been fully informed about the nature of the study, the researcher's responsibilities and the likely benefits of this study.

Date

Signature

APPENDIX – V

INTERVIEW SCHEDULE REGARDING KNOWLEDGE ON SELECTED ASPECTS OF ANTENATAL CARE DURING FIRST AND SECOND TRIMESTER AMONG PRIMI MOTHERS.

Instruction:

I request you to kindly read and understand the questions properly and give the correct answer.

SECTION A: BACK GROUND DATA

1. Age:
 - a) 18 – 20 years
 - b) 21 – 25 years
 - c) 30 – Above

2. Gestational weeks:
 - a) 1-3 months
 - b) 3-4 months
 - c) 4-5 months

3. Education:
 - a) Illiterate
 - b) Primary school
 - c) Higher secondary school
 - d) Any degree

4. Occupation
 - a) House wife
 - b) Cooley
 - c) Office work

5. Type of Family:
 - a) Nuclear

b) Joint

6. Bread winner of the Family:

a) Father in Law

b) Husband

c) Wife

7. Education of Spouse:

a) Illiterate

b) Primary school

c) Higher secondary school

d) Any degree

8. Income:

a) >5000 / month

b) 6000 – 10000 / month

c) 10000 above / month

9. Source of previous information:

a) Any Medias

b) Through VHN

c) Any Relatives

d) Others

QUESTIONS:

1. Where you have registered your pregnancy?

a) Aungavadi

b) PHC

c) GH

2. Where you had registered your pregnancy?

a) 1-2 month

b) 2-3 month

d) 4-5 month

3. What is the purpose of the regular check up?
 - a) To know about the sex of the baby
 - b) To get opinion from doctors
 - c) To maintain the health of the mother of feotus
4. What is the normal blood pressure?
 - a) 100/ 90 mmHg
 - b) 120/ 80 mmHg
 - c) 130/ 80 mmHg
5. What is the purpose of checking blood pressure?
 - a) To prevent hypertention
 - b) To know about the blood pressure
 - c) To maintain the blood pressure
6. Which trimester you check GTT?
 - a) I st trimester
 - b) II nd trimester
 - c) III rd trimester
7. What is purpose of checking blood glucose level?
 - a) To prevent gestational diabetes mellitus
 - b) To prevent over weight of the baby
 - c) To know about the blood glucose level
8. What are the sources of protein rich diet?
 - a) Fish
 - b) Meat
 - c) Egg
9. What are the sources of vitamin A diet?
 - a) Vegetables
 - b) Liver
 - c) Yellow fruit
10. Which drug is prescribe to gain iron?
 - a) IFA
 - b) ART
 - c) Vit-E

11. What is the cause for anaemia during pregnancy?
 - a) Low in intake of iron rich diet
 - b) Foetus absorbs iron from the mother
 - c) Modern food pattern
12. When the colostrum will be secreted during pregnancy?
 - a) 12 th week
 - b) 15 th week
 - c) 16 th week
13. What is the reason for frequency of micturition during pregnancy?
 - a) Increased glomerular filtration rate
 - b) Pressure on the bladder as the presenting part
14. Which time the signs of nausea and vomiting appear during pregnancy?
 - a) First trimester
 - b) Second trimester
 - c) Third trimester
15. What is the reason for back ache during pregnancy?
 - a) Weight gain
 - b) Muscular spasms
 - c) Urinary infection
16. How to prevent acidity and heart burn during pregnancy?
 - a) Having bland diet
 - b) Avoid lying down position
 - c) Avoid oil content foods
17. What is the purpose of breast care?
 - a) To prevent infection
 - b) To find out any breast abnormalities like that inverted nipples
 - c) To maintain a breast care
18. How many times is TT advised during pregnancy?
 - a) 1 Time
 - b) 2 Time
 - c) 3 Time

19. Which month you take first dose of inj:TT ?
- a) 3 Month
 - b) 4 Month
 - c) 5 Month
20. What is the purpose of taking vaccines during pregnancy?
- a) To safe your pregnancy
 - b) To prevent cross infection to the baby
 - c) To prevent health of the baby
21. During pregnancy the following changes occur in vagina?
- a) Increasing in length
 - b) Increase in secretion
 - c) Increase in vascularity
22. When will you start and take T.FST during pregnancy
- a) Before pregnancy
 - b) 2 month
 - c) 3 month
23. How many time practice the exercise per day?
- a) 1 time
 - b) 1-2 time
 - c) 2-3 time
24. What type of exercise is advised to maintain good abdominal tone
- a) Breathing exercise
 - b) Stomach –strengthening exercise
 - c) Pelvic tilting exercise.
25. What is the purpose of foot and leg exercise ?
- a) To prevent edema.
 - b) To improve the th. Blood circulation
 - c) To maintain the foot and leg exercise.
26. Which exercise easy to follow by pregnant?
- a) Breathing exercise .
 - b) Pelvic floor exercise
 - c) Knee rolling exercise.

27. What is the safe period to have sexual activity?

- a) 5 month
- b) 7 month
- c) 8 month

28. Who all should avoid sexual activity during pregnancy?

- a) The person who had complaints of pregnancy
- b) The person who have traces of diabetes
- c) The person who have hypertension

29. Before exercise doing the pregnant women

- a) Avoid heavy exercise
- b) To prescribe doctor
- c) Avoid eating

30. What are the advantages for exercise

- a) Increase the blood circulation for mother and fetus
- b) Increase appetite
- c) loss weight

பேறுகால முந்திய பராமரிப்பு

- 1) வயது
அ) 18 வருடங்கள் – 20 வருடங்கள்
ஆ) 21 வருடங்கள் – 25 வருடங்கள்
இ) 30 வயதுக்கு மேற்பட்ட
- 2) கற்பகால வயது
அ) 1–3 மாதங்கள்
ஆ) 3–4 மாதங்கள்
இ) 5–6 மாதங்கள்
- 3) கல்வித்தகுதி
அ) படிப்பு அறிவு இல்லாதவர்கள்
ஆ) தொடக்கப்பள்ளி கல்வி
இ) உயர்நிலைப்பள்ளி கல்வி
ஈ) பட்டதாரி
- 4) வேலை தகுதி
அ) வீட்டு மனைவி
ஆ) கூலி
இ) அலுவலக பணியாளர்
- 5) எவ்வகை குடும்பம்
அ) கூட்டுக் குடும்பம்
ஆ) தனி குடும்பம்
- 6) குடும்ப தலைவர்
அ) மாமனார்
ஆ) கணவர்
இ) மனைவி
- 7) கணவரின் கல்வித்தகுதி
அ) படிப்பு அறிவு இல்லாதவர்கள்
ஆ) தொடக்கப்பள்ளி கல்வி
இ) உயர்நிலைப்பள்ளி கல்வி
ஈ) பட்டதாரி
- 8) கணவரின் மாத வருமானம்
அ) 5000/மாதம்
ஆ) 6000–10,000/மாதம்
இ) 10,000 – அதற்கும் மேற்பட்ட/மாதம்

- 9) இதற்கு முன் கிடைத்த அனுபவம்
 அ) வேறு ஏதாவது ஊடகங்கள்
 ஆ) கிராமப்புற நலவாழ்வு செவிலியர்கள்
 இ) உறவினர்கள்
 ஈ) மற்றவர்கள்

கீழ்க்காணும் வினாக்களை படித்து சரியான விடையை தேர்வு செய்யவும்.

- 1) உங்கள் கார்ப்ப பதிவு எங்கே செய்தீர்கள்?
 அ) அங்கன்வாடி
 ஆ) அரசு ஆரம்ப சுகாதார நிலையம்
 இ) அரசு பொது மருத்துவமனை
- 2) உங்கள் கார்ப்ப பதிவு எந்த மாதத்தில் செய்தீர்கள்?
 அ) 1-2 மாதங்கள்
 ஆ) 2-3 மாதங்கள்
 இ) 4-5 மாதங்கள்
- 3) வழக்கமான பரிசோதனையின் நோக்கம் என்ன?
 அ) குழந்தையின் பாலினம் கண்டறிய
 ஆ) மருத்துவரின் நல்ல கருத்திற்காக
 இ) அம்மா மற்றும் குழந்தையின் ஆரோக்கியம் பராமரிக்க
- 4) இயல்பான இரத்த அழுத்தம் என்ன?
 அ) 100/90 mm Hg
 ஆ) 120/80 mm Hg
 இ) 130/80 mm Hg
- 5) இரத்த அழுத்த பரிசோதனையின் நோக்கம் என்ன?
 அ) உயர் அழுத்தத்தை தடுப்பதற்கு
 ஆ) இரத்த அழுத்தத்தை தெரிந்து கொள்வதற்கு
 இ) இரத்த அழுத்த பரிசோதனையை வழக்கப்படுத்திக் கொள்வதற்கு
- 6) எந்த கார்ப்ப காலத்தில் குளுக்கோஸ் சகிப்பு சோதனையை செய்து கொண்டீர்கள்?
 அ) முதல் கார்ப்பகாலத்தில்
 ஆ) இரண்டாவது கார்ப்பகாலத்தில்
 இ) மூன்றாவது கார்ப்பகாலத்தில்
- 7) இரத்த குளுக்கோஸ் அளவு பரிசோதனையின் நோக்கம் என்ன?
 அ) கார்ப்பகால சர்க்கரை வியாதி வராமல் தடுக்க
 ஆ) குழந்தை அதிக எடை ஆகாமல் தடுப்பதற்கு
 இ) இரத்தத்தில் உள்ள சர்க்கரையின் அளவை தெரிந்து கொள்வதற்கு
- 8) எந்த உணவில் அதிக அளவில் புரோட்டீன் சத்து உள்ளது?
 அ) மீன்
 ஆ) இறைச்சி
 இ) முட்டை

- 9) எந்த உணவில் அதிக அளவில் வைட்டமின் A சத்து உள்ளது?
 அ) காய்கறிகள்
 ஆ) ஈரல்
 இ) மஞ்சள் நிற பழங்கள்
- 10) எந்த மருந்தில் இரும்புச்சத்து உள்ளது?
 அ) இரும்பு சத்து மற்றும் ஃபோலிக் அமில மாத்திரைகள்
 ஆ) ஆன்டி-ரெட்ரோவைரல் தெரபி மாத்திரைகள்
 இ) வைட்டமின் E மாத்திரைகள்
- 11) கர்ப்பகாலத்தில் இரத்தசோகை வருவதற்கான காரணங்கள் எவை?
 அ) குறைந்த அளவு இரும்புச்சத்து உள்ள உணவை எடுத்துக்கொள்ளாதல்.
 ஆ) வயிற்றில் இருக்கும் குழந்தை இரும்புச்சத்தை எடுத்துக்கொள்ளாதல்.
 இ) நவீன உணவுமுறை
- 12) கர்ப்பிணி பெண்களுக்கு சீம்பால் எப்பொழுது கரக்கும்?
 அ) 12 வாரம்
 ஆ) 15 வாரம்
 இ) 16 வாரம்
- 13) எந்த காரணங்களுக்காக கர்ப்பிணி பெண்கள் அடிக்கடி சிறுநீர் கழிக்கிறார்கள்?
 அ) அதிக அளவு குளோமரலர் வடிகட்டுதல்.
 ஆ) குழந்தையின் கீழறங்கும் பகுதி சிறுநீர்ப்பையை அழுத்துதல்.
 இ) அதிக அளவு தண்ணீர் குடித்தல்.
- 14) எந்த கர்ப்பகாலத்தில் கர்ப்பிணி பெண்களுக்கு வாந்தி, மயக்கம் போன்ற பிரச்சனைகள் வருகின்றன?
 அ) முதல் கர்ப்பகாலத்தில்
 ஆ) இரண்டாவது கர்ப்பகாலத்தில்
 இ) மூன்றாவது கர்ப்பகாலத்தில்
- 15) என்ன காரணங்களுக்காக கர்ப்பிணி பெண்களுக்கு முதுகுவலி வருகின்றன?
 அ) எடை அதிகரித்தல்
 ஆ) தசை பிடிப்பு
 இ) சிறுநீர் பாதை நோய் தொற்றுதல்
- 16) கர்ப்பிணி பெண்கள் செரிமானக் கோளாறு மற்றும் நெஞ்சு எரிச்சலை எப்படி தடுப்பது?
 அ) வறட்சியான உணவை உட்கொள்ளாதல் (உதாரணம்) பிஸ்கட் மற்றும் ரஸ்க்
 ஆ) சாய்ந்து படுத்தல்.
 இ) எண்ணெய்யில் செய்த உணவுப் பொருட்களை தவிர்த்தல்
- 17) மார்பக பாதுகாப்பின் நோக்கம் என்ன?
 அ) நோய்தொற்றை தவிர்த்தல்
 ஆ) மார்பக காய்கள் உள்நோக்கி இருத்தல் போன்றவைகளை கண்டுபிடித்தல்
 இ) மார்பக பாதுகாப்பை பராமரிக்க

- 18) எத்தனை முறை கர்ப்பிணி பெண்களுக்கு இரணஜென்னி தடுப்பூசி முறை பரிந்துரைக்கப்படுகிறது?
- அ) ஒரு முறை
ஆ) இரண்டு முறை
இ) மூன்று முறை
- 19) எந்த மாதத்தில் முதல் இரணஜென்னி தடுப்பூசி கர்ப்பிணி பெண்கள் எடுத்துக் கொள்கிறார்கள்?
- அ) 3-வது மாதத்தில்
ஆ) 4-5து மாதத்தில்
இ) 5-வது மாதத்தில்
- 20) கர்ப்பிணி பெண்கள் தடுப்பூசி மருந்துகள் எடுத்துக் கொள்வதின் நோக்கம் என்ன
- அ) குழந்தையை பாதுகாத்துக்கொள்ள
ஆ) நோய்த்தொற்று குழந்தைக்கு பரவாமல் தடுப்பதற்கு
இ) குழந்தையின் உடல்நலத்தை மேம்படுத்துவதற்கு
- 21) கர்ப்பகாலத்தில் யோனி பாதையில் ஏற்படும் மாற்றங்கள் பின்வருமாறு.
- அ) அதன் நீளம் அதிகரித்தல்.
ஆ) அதில் உள்ள சுரப்புகள் அதிகரித்தல்.
இ) அதன் நெகிழ்வுத்தன்மை அதிகரித்தல்
- 22) இரும்புச்சத்து மற்றும் ஃபோலிக் அமில மாத்திரைகளை எந்த மாதத்திலிருந்து எடுத்துக் கொள்வீர்கள்?
- அ) கர்ப்பகாலத்திற்கு முன்பு
ஆ) இரண்டாவது மாதத்தில்
இ) மூன்றாவது மாதத்தில்
- 23) ஒரு நாளைக்கு எத்தனை முறை உடற்பயிற்சியை மேற்கொள்வீர்கள்?
- அ) ஒரு முறை
ஆ) 1-2 முறை
இ) 2-3 முறை
- 24) வயிற்றுப்பகுதியில் உள்ள தசைகளை பராமரிப்பதற்கு எந்த உடற்பயிற்சி அறிவுரை செய்யப்படுகிறது?
- அ) மூச்சுப்பயிற்சி
ஆ) வயிற்றுப் பகுதியை உறுதிப்படுத்தும் உடற்பயிற்சி
இ) இடுப்புப்பகுதியை
- 25) கால்பகுதி மற்றும் பாதப்பகுதியை சுழற்றும் உடற்பயிற்சியின் நோக்கம் என்ன?
- அ) நீர்க்கட்டுதலை தடுப்பதற்கு
ஆ) இரத்த ஓட்டத்தை அதிகரிக்க
இ) கால் மற்றும் பாதப்பகுதியை பராமரிக்க

- 26) எந்த உடற்பயிற்சி கர்ப்பிணி பெண்கள் சுலபமாக செய்யக்கூடிய உடற்பயிற்சி?
அ) மூச்சுப்பயிற்சி
ஆ) இடுப்புப் பகுதி உடற்பயிற்சி
இ) கால் மூட்டுப்பகுதியை சுழற்றும் உடற்பயிற்சி
- 27) கர்ப்பிணி பெண்கள், பாதுகாப்பான உடல் உறவை தொடர்வதற்கு எந்த மாதம் ஏற்றது?
அ) 5-வது மாதம்
ஆ) 7-வது மாதம்
இ) 8-வது மாதம்
- 28) யாரெல்லாம் கர்ப்பகாலத்தில் உடல் உறவை வைத்துக் கொள்ளக்கூடாது
அ) இரத்தப்போக்கு உள்ளவர்கள்
ஆ) சர்க்கரை நோய் உள்ளவர்கள்
இ) அதிக இரத்த அழுத்தம் உள்ளவர்கள்
- 29) உடற்பயிற்சி செய்வதற்கு முன்பு கர்ப்பிணி பெண்கள் மனதில் வைத்துக் கொள்ள வேண்டியவை.
அ) கடினமான உடற்பயிற்சிகளை செய்யக்கூடாது.
ஆ) மருத்துவர் ஆலோசனையுடன் உடற்பயிற்சிகளை செய்ய வேண்டும்.
இ) சாப்பிடக்கூடாது.
- 30) உடற்பயிற்சியால் ஏற்படும் நன்மைகள்
அ) உடற்பயிற்சியால் அம்மாவிற்கும் குழந்தைக்கும் இரத்த ஓட்டம் அதிகரிக்கும்
ஆ) பசி உண்டாகும்
இ) எடை குறையும்

பேறுகாலத்துக்கு முந்திய காலப் பராமரிப்பு

பேறுகாலத்துக்கு முந்திய கால நலவாழ்வுப் பராமரிப்புப் பணிகளின் குறிக்கோள்கள் வருமாறு.

1. மகப்பேற்றின்போது, தாய் முடிந்த அளவு மிகச் சிறப்பான உடல்நலத்துடன் இருக்கத் தாய்க்கு உதவிட.
2. நலமார்ந்த குழந்தை பிறப்பை உறுதிப்படுத்திக் கொள்ள.
3. ஏதாவது அசாதாரணத் தன்மை இருந்தால் அதை முடிந்த அளவு விரைவில் கண்டுபிடித்துச் சிகிச்சை அளிக்க.
4. அந்தப் பெண்ணுக்குக் கீழ்க்கண்டவைகளை போதிக்க.
 - a) கருவுற்று இருப்பது பற்றி அவள் அறிந்துகொள்ள வேண்டியவைகள் யாவை?
 - b) கருக்கொண்டுள்ள காலத்தின்போது அவள் நலமார்ந்த நிலையில் இருப்பது எப்படி?
 - c) அவள் என்ன உணவுகளை உண்ண வேண்டும்?
 - d) மகப்பேற்று வலி (Labour) மற்றும் மகப்பேறு (பிரசவம் Delivery) க்காக தயார் செய்து கொள்ளுவது எப்படி?
 - e) குழந்தையைப் பராமரிப்பது எப்படி?
 - f) குடும்பக் கட்டுப்பாடு பற்றி?

கருவுற்றுள்ள காலத்தில் நலவாழ்வு மதிப்பீடு:

கருவுற்றுள்ள காலத்தில் ஒரு பெண் நலமார்ந்து (Healthy) இருக்கவும், நலமார்ந்த குழந்தையை சுகப்பிரசவத்தில் ஈன்றெடுக்கவும் ஒரு பெண்ணுக்கு உதவ வேண்டுமானால், அவளுடைய வரலாற்றைக் குறித்துக் கொள்ளவும், சில சிறு சோதனைகளையும், பரிசோதனைகளையும் நாம் செய்தாக வேண்டும்.

அவளது முதல் வருகையின்போது, அவள் பெயர் பதிவு செய்யப்படுகிறது. மற்றும் பேறுகாலத்துக்கு முந்திய அட்டை நிரப்பப்படுகிறது. முடிந்தால், அவளது வரலாறு, கருவுற்ற காலத்தின் தொடக்கத்திலேயே குறித்துக் கொள்ள வேண்டும். கேட்கும் கேள்விகள், எளிமையான வார்த்தைகளில் அன்புடன் பொறுமையுடனும், சாமர்த்தியமாகவும் கேட்கப்பட வேண்டும். குறிப்பாக, அது, அவளது முதல் கர்ப்பமாக இருந்தால்.

1. அவள் சொந்த வரலாறு:

- ❖ அவள் பெயர்
- ❖ முகவரி
- ❖ கணவர் (அல்லது) நெருங்கிய சொந்தக்காரர்
- ❖ வயது மற்றும் அவளுக்கு வந்திருந்த நோய்கள்
- ❖ அறுவைசிகிச்சை (அ) விபத்துகள் ஆகியவைகளை அறிந்து கொள்ள வேண்டும்.

2. குடும்ப வரலாறு:

குடும்பப் பதிவேட்டில், இது முன்பே குறிக்கப்பட்டிருக்கும். குடும்பத்தில் காசநோய், இருதயநோய் (அல்லது) நீரிழிவு நோய் இருந்ததா என்றும் இரட்டைக் குழந்தைகள் இருக்கும் வாய்ப்புகள் உள்ளதா என்றும் விசாரித்துப்பார்.

3. சமூக வரலாறு:

இதுவும் முன்பே கிடைத்திருக்கலாம், குடும்பக் கட்டுப்பாட்டை ஏற்றுக் கொண்டுள்ளனரா என்றும் விசாரித்து அறி.

4. முந்தைய மகப்பேற்று வரலாறு:

இவள் முன்பே பதிவு செய்து கொண்டிருப்பவள் என்றால் இதுவும் உனக்குக் கிடைக்கும். இதில் முந்தைய ஒவ்வொரு கர்ப்பகாலம், பிரசவ முறை (Labour) மற்றும் குழந்தை போன்ற தகவல்கள் அடங்கியிருக்கும்.

5. இப்போதைய கருக்கால வரலாறு:

இதில் சரிசமநிலை (மகப்பேறுகளின் எண்ணிக்கை) உயிருடன் உள்ள குழந்தைகள் மற்றும் அவர்களில் கடைசிக் குழந்தையின் வயது மற்றும் கடைசி மாதவிலக்கின் தேதி (முதல் நாள்) ஆகியவை அடங்கியிருக்கும். இதிலிருந்து குழந்தை பிறக்க எதிர்பார்க்கப்படும் நாளை நீ கணக்கிடலாம். (7 நாட்களை கூட்டு, மூன்று மாதங்களைக் கழி).

அவள், பொதுவாக எப்படி உணருகிறாள். இந்தக் கருவுற்று இருக்கும் நிலையை அவள் விரும்புகிறாளா, கருவின் அசைவுகளை அவள் உணருகிறாளா, அவள் இப்போது குழந்தைக்குத் தாய்ப்பால் கொடுத்துக்கொண்டு இருக்கிறாளா என்பனவற்றைக் கண்டுகொள்.

அவள் உட்கொள்ளும் உணவு மற்றும் அவளது அன்றாட வேலைகள் ஆகியவற்றையும் கண்டுகொள். பிற வழக்கமான சிறு சோதனைகளையும் பரிசோதனைகளையும் மேற்கொள்.

கருவுற்றுள்ள பெண்களுக்கு நலவாழ்வுக் கல்வி:

கற்பித்தல் என்பது, கருவுற்றிருக்கும் ஒரு பெண்ணை எப்போதெல்லாம் சந்திக்கிறாயோ, அப்படிப்பட்ட சந்தர்ப்ப முறையிலும் இருக்க வேண்டும். மற்றும் கற்பிக்கும் திட்டம் வகுத்துக்கொண்டு ஏற்பாடு செய்யப்பட்ட ஒரு குழுவுக்குக் கற்பிப்பதாகவும் இருக்க வேண்டும். இடம், பேறுகாலத்துக்கு முந்தைய மருத்துவ நிலையத்திலோ (அ) வேறு வேளையிலோ இருக்கலாம். கற்பித்தலில் கீழ்க்கண்டவையும் அடங்கியிருக்க வேண்டும்.

1. கருவின் வளர்ச்சியும், பெருக்கமும்.
2. கருவுற்று இருக்கும் காலத்தில் காலந்தவறாது பரிசோதித்துக் கொள்ளுவதின் முக்கியத்துவம்.
3. நல்ல உணவு தேவை.
4. கருவுக்குத் தீங்கு செய்யும் மருந்துகளை உட்கொள்ளக் கூடாது.
5. தாய் மற்றும் குழந்தையின் பாதுகாப்புக்கு இரணஜன்னி டாக்ஸாய்டு (Tetanus Toxoid) ஊசி போட்டுக் கொள்ளுதல்.
6. இரத்தச் சோகையைத் தவிர்க்க இரும்புச் சத்து மற்றும் ஃபோலிக் அமில மாத்திரைகள் உட்கொள்ளல்.

தாயின் நலவாழ்வு:

சுகாதாரம் (Hygiene) இதற்குக் கீழ்க்கண்டவைகள் தேவை

சுத்தமாக காற்று, சுமாரான உடற்பயிற்சி, சரியான உடல் இருப்பு நிலை (Posture), ஓய்வும் தூக்கமும் இறுக்கம் தளர்ந்து இருத்தல் (Relaxation). இது பிரசவ வலி எளிமையாக இருக்க உதவும். தளர்த்தியான ஆடைகள் மற்றும் தாங்கிக் கொள்ளும் மாப்புக் கச்சை (Bra).

தினமும் வயிறு கழிதல் (Bowel movement) அதிகமான தண்ணீர், பழங்களின் தேவை.

பற்கள் பராமரிப்பு.

தினமும் குளித்தல் மற்றும் மாற்பகங்களின் பராமரிப்பு. அவைகளை அழுத்தி விடு. குளிக்கும்போது மாற்பகக் காம்புகளைப் பிதுக்கி விடவேண்டும்.

8 மாதங்களுக்குப் பிறகு உடலுறவைத் தவிர்த்தல்.

பிரசவ வலியின் அடையாளங்கள் மற்றும் பிரசவ வலியின்போது என்ன எதிர்பார்க்கலாம். உன்னை எப்போது கூப்பிடுவது.

குழந்தையைப் பராமரித்தல், தாய்ப்பால் ஊட்டுதல்.

குடும்பக் கட்டுப்பாடு.

கருவுற்றுள்ள காலத்தில் ஊட்ட உணவு (Nutrition)

கருவுற்றுள்ள பெண்ணின் உணவு கீழ்க்கண்ட தேவைகளை நிறைவேற்ற வேண்டும்.

1. வளரும் கருவின் தேவைகள்.
2. தாயின் உடல்நலத்தைப் பராமரிக்க.
3. பிரசவ வலியின்போது தேவைப்படும் உடல் வலிமையைத் தருவதற்கு.
4. வெற்றிகரமாகப் பால் கொடுக்க.

புரத உணவுகள்:

கருவின் வளர்ச்சிக்கு தேவை, முடியுமானால் கருவுற்றுள்ள பெண், அதிக அளவில் பால், முட்டைகள், மீன், கோழி மற்றும் இறைச்சி உண்ண வேண்டும்.

அவள் மரக்கறி உணவு உண்பவளானால் அவள் பலவகைத் தானியங்களும் பயறுகளும், கொட்டைகளும் (Nuts) உண்ண வேண்டும்.

இரும்புச் சத்து:

குழந்தையின் உணவை உண்டாக்கிக் கொள்ளவும், இரத்த சோகையைத் தவிர்க்க, அல்லது குறைக்க மிகவும் முக்கியம். அவள் சர்க்கரைக்குப் பதிலாக வெல்லத்தையும், கேழ்வரகு அல்லது கம்பு கொண்டு தயாரிக்கப்பட்டவைகளையும், எள்ளும் (Sesame) மற்றும் அதிகமாகப் பச்சை நிறக் கீரைகளையும் உண்ண வேண்டும் ஈரல் மற்றும் சிறுநீரகம் கூட, இரும்புச்சத்து அதிகம் கொண்டவை.

சுண்ணாம்புச் சத்து:

குழந்தையின் எலும்புகள் மற்றும் பற்களை உண்டாக்கத் தேவை. சுண்ணாம்புச் சத்து தருவதில் மிகச் சிறந்தது. பால், கேழ்வரகு மற்றும் கம்பு வகைகளில் கூட சுண்ணாம்புச் சத்து உள்ளது.

சிறிய கருவாட்டை உண்ணும்படி அவளை ஊக்கப்படுத்த வேண்டும்.

வைட்டமின்கள்:

கருவற்று இருக்கும் பெண்ணுக்கு மிகவும் முக்கியம். அவள் அதிக அளவில் காய்கறிகளை (சிறப்பாகப் பச்சைக் கீரை வகைகளை), நாரத்தை, எலுமிச்சை வகையைச் சேர்ந்தவைகள் (Citrus kinds) உள்ளிட்ட பழங்களையும் உண்ண வேண்டும்.

நோய்த்தடை காப்பு அட்டவணை (IMMUNIZATION SCHEDULE)

வயது	தடுப்பூசி மருந்து
பேறுகாலத்துக்கு முந்திய 20 வாரங்கள்	இரணஜன்னி டாக்சாய்டு CTI முதல் ஒரு வேளை மருந்து (1 st dose) கருவற்றிருக்கும் தாய்மார்களுக்கு.
28 வாரங்கள்	2 ஆம் வேளை மருந்து (2 nd dose) அடுத்துக் கருவறும் போது செறிவூட்டும் (Booster dose) மருந்து மட்டும்.
36 வாரங்கள்	TT 3 ஆம் வேளை மருந்து

கர்ப்பிணி பெண்கள் தினமும் எடுத்துக்கொள்ள வேண்டிய உணவு அளவுகள்

	கர்ப்பிணி அல்லாத பெண்கள்	கர்ப்பிணி பெண்கள்	தாய்ப்பால் கொடுக்கும் பெண்கள்	உணவுகள்
சக்தி கி.கலோரி	2200 K.Cal	2500 K.Cal	2600 K.Cal	புரத சத்து, கொழுப்பு, கார்போஹைட்ரேட்
புரதம்	50 கிராம்	60 கிராம்	65 கிராம்	கறி, மீன், பருப்பு வகைகள்
இரும்புச்சத்து	18 கிராம்	40 கிராம்	30 கிராம்	கறி, முட்டை
கால்சியம்	500 மி.கி.	1000 மி.கி.	1500 மி.கி.	பால், எலும்பு கறி
சிங்	12 மி.கி	15 மி.கி	19 மி.கி	கறி, முட்டை, பருப்பு வகைகள்
அயோடின்	150 µg	175µg	200 µg	அயோடின் நிறைந்த உப்பு பருப்பு வகைகள், கீரை வகைகள்
விட்டமின் – A	5000 I.U	6000 I.U	8000 I.U	காய்கறிகள், ஈரல், பழங்கள்
விட்டமின்-D	200 I.U	400 I.U	400 I.U	பருப்பு வகைகள்
தையமின்	1.1 mg	1.5 mg	அனைத்தும் கர்ப்பிணி பெண்களின் அளவுகள்	கறி, பருப்பு வகைகள், பழங்கள், தக்காளி, கீரை வகைகள், காய்கறிகள்.

ரைபோபிலோவின்	1.1 mg	1.6 mg		இறைச்சி வகைகள்
நிக்கோடிக் ஆசிட்	15 mg	17 mg		
அஸ்கார்பிக் ஆசிட்	60 mg	70 mg		
போலிக் ஆசிட்	200 µg	400 µg		
விட்டமின் B ₁₂	2 µg	2.2 µg		

கர்ப்பிணி பெண்கள் மேற்கொள்ள வேண்டிய உடற்பயிற்சிகள்:

கர்ப்பிணி பெண்கள் தினமும் உடற்பயிற்சிகளை செய்ய வேண்டும். அப்பொழுது தான் அவர்களுக்கு குழந்தை பிறப்பு எளிதாகும். இது அவர்களுக்கும், குழந்தைக்கும் மிகவும் நல்லது.

உடற்பயிற்சியால் ஏற்படும் நன்மைகள்:

1. உடற்பயிற்சியால் அம்மாவிற்கும் குழந்தைக்கும் இரத்த ஓட்டம் அதிகரிக்கும்.
2. உடற்பயிற்சியால் வலி மற்றும் பிடிப்புகள் குறையும்.
3. உடற்பயிற்சியால் தினமும் சுறுசுறுப்பாக இருப்பார்கள்.
4. அவர்களின் உடல் எடையும் கட்டுக்குள் இருக்கும்.
5. உடற்பயிற்சியால் சிறு சிறு பிரச்சனைகள் கூட குணமாகும்.
(உ.ம்) வாந்தி, மயக்கம்.
6. உடற்பயிற்சியால் உடல்நீதியாகவும் மன ரீதியாகவும் ஆரோக்கியமாக இருப்பார்கள்.
7. உடற்பயிற்சியால் சுலபமாக சுகப்பிரசவம் ஆகுவதற்கு ஏதுவாக இருக்கும்.

உடற்பயிற்சி செய்வதற்கு முன்பு கர்ப்பிணி பெண்கள் மனதில் வைத்துக் கொள்ள வேண்டியவை:

1. கடினமான உடற்பயிற்சிகளை செய்யக்கூடாது.
2. மருத்துவர் ஆலோசனையுடன் உடற்பயிற்சிகளை செய்ய வேண்டும்.
3. உடற்பயிற்சியின் போது இறுக்கமான உடைகளை அணியக்கூடாது. இலேசான உடைகளை அணியவேண்டும்.
4. உடற்பயிற்சிக்கு முன்பு உடலை தயார்படுத்திக் கொள்ள வேண்டும்.
5. அடிக்கடி உடல் அசைவுகளை மாற்றிக் கொண்டே வரவேண்டும்.
6. கடினமான உடற்பயிற்சிகளை செய்யக்கூடாது. அது உங்களுக்கும், குழந்தைக்குள் ஆபத்தை விளைக்கக்கூடியவை.

7. உடற்பயிற்சியை செய்து முடித்த பிறகு மெதுவாக அந்த இடத்தை விட்டு எழுந்திருக்க வேண்டும்.
8. அமைதியாக உடற்பயிற்சிகளை மேற்கொள்ள வேண்டும்.

உடற்பயிற்சிகள்:

1. நடைபயிற்சி
2. நீச்சல்
3. யோகாசனம்
4. மூச்சுப்பயிற்சி
5. இடுப்புப் பகுதி உடற்பயிற்சி
6. வயிற்றுப் பகுதியை உறுதிபடுத்தும் உடற்பயிற்சி
7. இடுப்பை திருப்பும் உடற்பயிற்சி
8. மூட்டுப் பகுதியை மடக்குதல்
9. கால் மூட்டுப்பகுதியை சுழற்றுதல்
10. தலையை தூக்குதல் உடற்பயிற்சி

நடைபயிற்சி:

நடைபயிற்சி கார்ப்பிணி பெண்களுக்கு ஒரு சிறந்த பயிற்சி ஆகும். இது மூட்டுப் பகுதிக்கும், கால்களுக்கும் ஒரு சிறந்த பயிற்சி ஆகும். இந்த பயிற்சியை கார்ப்பிணி பெண்கள் ஒன்பது மாதங்கள் வரை தொடரலாம்.

நீச்சல்:

நீச்சல் பயிற்சி மிகச் சிறந்த உடற்பயிற்சியாகும். மற்றும் பாதுகாப்பான ஒரு உடற்பயிற்சியாகும். இது உடலில் அதிகமான சதை பகுதிகளுக்கு (கை மற்றும் கால் பகுதிகளுக்கு) மற்றும் இதய தசைகளுக்கு மிகச் சிறந்த உடற்பயிற்சியாகும். இந்த உடற்பயிற்சியில் கார்ப்பிணி பெண்கள் மிகவும் இலேசானதாக உணருவார்கள்.

யோகாசனம்:

இந்த உடற்பயிற்சி தசைகளுக்கு வலுவூட்டக் கூடியதாகவும், வளைந்து கொடுக்கும் தன்மையும் அளிக்கின்றது. இந்த பயிற்சியை குறைந்த நேரம் மட்டும் செய்ய வேண்டும். அதிக நேரம் செய்ய வேண்டாம்.

சுவாசப் பயிற்சி:

சுவாசப் பயிற்சியானது கார்ப்பிணி பெண்கள் மிகவும் சுலபமாக செய்யக்கூடிய உடற்பயிற்சியாகும். இந்த பயிற்சியானது உடலுக்கும், மனதிற்கும் சிறந்த உடற்பயிற்சியாகும். இது வயிற்றுப் பகுதியில் உள்ள தசைகளுக்கும், இடுப்புப் பகுதிக்கும் சிறந்த உடற்பயிற்சியாகும்.

சுவாசப் பயிற்சி செய்யும் வழிமுறைகள்:

1. ஒரு அமைதியான இடத்தில் கால்களையும், கைகளையும் மடக்கி உட்கார்ந்து கொள்ள வேண்டும்.
2. அதன்பின் மூச்சை நன்றாக இழுத்து பிடித்துக் கொள்ள வேண்டும். அப்பொழுது நல் வயிற்றின் அடிபாகம், உள்ளீத்துக் கொள்ள வேண்டும். சிறிது நேரம் (10 mts) மூச்சை பிடித்துக் கொண்டு பிறகு மெதுவாக வெளியே விட வேண்டும். இதனால் நம்முடைய அடிவயிற்று பகுதிக்கும், முதுகு பகுதிக்கும் சிறந்த உடற்பயிற்சியாகும்.
3. இந்த உடற்பயிற்சியின் மூலம், இடுப்பு பகுதியில் உள்ள தசைகளுக்கும், வயிற்றுப் புறத்தில் உள்ள தசைகளுக்கும் சிறந்த உடற்பயிற்சியாகும். இதை எல்லா மாதங்களிலும் உடற்பயிற்சியை மேற்கொள்ளலாம்.

இடுப்புப் பகுதி உடற்பயிற்சி:

1. ஒரு அமைதியான இடத்தில் உட்கார்ந்து கொள்ள வேண்டும்.
2. பிறகு வயிற்றுப் பகுதியில் உள்ள தசைகளையும், பிறப்பு உறுப்பில் உள்ள தசைகளையும் இறுக்கி பிடித்து பிறகு தளர்வடையச் செய்ய வேண்டும்.
3. இதை பத்து நிமிடங்கள் (10 mts) வரை கார்ப்பிணி பெண்கள் செய்ய வேண்டும்.
4. இதன்மூலம் சிரிக்கும் போதும், இருமல் வரும்போதும், தும்மல் வரும்போதும், சிறுநீர் மற்றும் மலம் வெளியேறுவதை தடை செய்யலாம்.
5. இந்த உடற்பயிற்சியால் கார்ப்பிணி பெண்களுக்கு சுலபமாக சுகப்பிரசவம் ஆவதற்கு வழிவகை செய்கிறது.

வயிற்றுப் பகுதியை உறுதிப்படுத்தும் உடற்பயிற்சி:

1. முதலில் பெட்டி போன்று நின்று கொள்ள வேண்டும்.
2. கால்களை இடுப்புக்கு கீழ்ப்பகுதியில் மடக்கிக் கொள்ள வேண்டும். கைகளை தோள்பட்டைக்கு கீழ்ப்பகுதியில் மடக்கிக் கொள்ள வேண்டும்.

3. கைவிரல்கள் முகத்தை நோக்கி இருக்கும்படி வைத்துக் கொள்ள வேண்டும். வயிற்றுப்பகுதியும், முதுகுபகுதியும் நேராக இருக்கும்படி வைத்துக்கொள்ள வேண்டும்.

வயிற்றுப் பகுதியில் உள்ள தசைகளை உள்ளிழுத்துக் கொள்ள வேண்டும். சிறிது நேரம் கழித்து தளர்த்தி விட வேண்டும். இப்படியே 10 முறை செய்ய வேண்டும். இதை செய்யும் போது கர்ப்பிணி பெண்கள் கவனமாக இருக்க வேண்டும். இந்த உடற்பயிற்சியின் மூலம் முதுகுபகுதியில் வலி ஏற்படுவதை தவிர்க்க முடியும்.

வயிற்றுப் பகுதியில் உள்ள தசைகளையும் வலுப்படுத்த முடியும்.

இடுப்பை திருப்பதல் உடற்பயிற்சி:

முதலில் நேராக நின்று கொள்ள வேண்டும். பிறகு இடுப்புப் பகுதியை வலப்புறமும், இடப்புறமும் திருப்பிக் கொண்டே வரவேண்டும்.

இவ்வாறு 10 முறை செய்ய வேண்டும்.

மூட்டுப் பகுதியை மடக்குதல்:

முதலில் நேராக படுத்துக் கொள்ள வேண்டும்.

அடுத்து ஒரு மூட்டுப் பகுதியையும் மட்டும் மடக்கிக் கொள்ள வேண்டும். அப்படியே 10 நிமிடங்களுக்கு நிறுத்திக்கொண்டு மூச்சை நன்கு இழுத்து விட வேண்டும்.

பின்னர் அடுத்த மூட்டுப் பகுதியையும் இதே போல் செய்து கொள்ள வேண்டும். இதன்மூலம் இடுப்பு பகுதியில் உள்ள தசைகளுக்கும், வயிற்றுப் பகுதியில் உள்ள தசைகளுக்கும் சிறந்த உடற்பயிற்சியாகும்.

கால் மூட்டுப் பகுதியை சுழற்றுதல்:

நேராக இருந்து கொண்டு கால் மணிக்கட்டில் உள்ள மூட்டுப்பகுதியை சுழற்ற வேண்டும். அதை வலது பக்கம் மற்றும் இடதுபக்கமாக சுழற்ற வேண்டும்.

இப்படியே சிலமுறை செய்து கொள்ள வேண்டும்.

இதன்மூலம் கால்களுக்கும், வயிற்றுக்கும் சிறந்த உடற்பயிற்சியாகும்.

தலையை தூக்குதல் உடற்பயிற்சி:

நேராக இருந்து கொண்டு (அ) படுத்துக் கொண்டு தலையை மட்டும் சிறிது தூரம் மேலே தூக்க வேண்டும்.

அப்படியே 3 நிமிடங்கள் வரை இருக்க வேண்டும்.

இதே போல் கர்ப்பிணி பெண்கள் 10 முறை செய்ய வேண்டும்.

இந்த உடற்பயிற்சியின் மூலம் கழுத்து வலி மற்றும் இடுப்பு பகுதியில் உள்ள தசைகள் இறுக்கமாகும்.

கர்ப்பிணி பெண்கள் செய்யக்கூடாத உடற்பயிற்சிகள்:

கர்ப்பிணி பெண்கள் சில உடற்பயிற்சிகள் கண்டிப்பாக தடை செய்ய வேண்டும். அவைகள் கீழ்வருமாறு.

- ❖ தாவுதல்
- ❖ ஜிம்நாஸ்டிக்
- ❖ கூடை பந்து
- ❖ ஹாக்கி
- ❖ குதிரை சவாரி
- ❖ சைக்கிள் ஓட்டுதல்

கர்ப்பகாலத்தில் ஏற்படும் உடல்ரீதியான மாற்றங்கள்:

பிறப்பு உறுப்பில் ஏற்படும் மாற்றங்கள்:

பெண் இனப்பெருக்க உறுப்பின் வெளிப்பகுதி:

சற்று வீங்கிய நிலையில் இருக்கம். லேபியாமெஜேரா மற்றும் மைனோராவானது அடர்ந்த நிறம் மற்றும் சற்று வீங்கிய நிலையில் இருக்கும்.

பெண்ணுறுப்பு:

பெண்ணுறுப்பு சற்று வீங்கிய நிலையில் இருக்கும். இரத்த ஓட்டமானது அதிகமாக இருக்கும். பெண்ணுறுப்பானது நீலம் கலந்த நிறத்தில் இருக்கும்.

பிறப்பு உறுப்பு பாதை:

பிறப்பு உறுப்பு பாதையானது மிகவும் மென்மையாக இருக்கும். இதை ஆறாவது வாரத்தில் இருந்து கர்ப்பிணி பெண்கள் உணரமுடியும்.

கருகுழாய்:

கரு குழாயானது கருப்பையின் மேல் பகுதிக்கு சென்றுவிடும்.

சினைப்பை:

சினைப் பையில் கார்பஸ் லூட்டியம் என்ற ஹார்மோன் அதிக அளவில் சுரக்கும். இவை எட்டாவது வாரத்தில் இருந்து சுரக்க ஆரம்பிக்கும்.

இதன் அடர்த்தியானது 2.5 செ.மீ. அதிகரிக்கும். இதில் hCG ஹார்மோன்.

மார்பகத்தில் ஏற்படும் மாற்றங்கள்:

மார்பகம் சற்று அளவில் பெரியதாகும். இரத்த குழாய்கள் விரிவடையும். நிணநீர் முடிச்சுகளும் அதிகமாகும். 12வது மாதத்தில் இருந்து கொலஸ்ட்ரம் என்னும் பால் சுரக்க ஆரம்பிக்கும். மார்பக காம்புகளை சுற்றி அடர்ந்த கருநிறத்தில் வளையம் உண்டாகும்.

எண்டோமெட்ரியம்:

எண்டோமெட்ரியமானது தடிமனாக மாறிவிடும்.

கருப்பை:

கருப்பையானது கர்ப்பகாலத்தில் அதிக அளவு பெரியதாகும். கன்னிப் பெண்களுக்கு 60 கிராம் எடையளவு இருக்கும். ஆனால் கர்ப்பிணி பெண்களுக்கு 1000 கிராம் எடையளவு இருக்கும். கருப்பையின் நீளம் 35 செ.மீ.

இரத்த ஓட்ட மண்டலம்:

கர்ப்பகாலத்தில் இரத்த ஓட்ட மண்டலமானது மாறுபடுகிறது. இரத்த அழுத்தம் அதிகரிக்கிறது. இரத்த குழாய்கள் அளவில் பெரிதாகிறது. இதயம் மற்றும் நுரையீரலுக்கு செல்லும் இரத்தமானது அதிகரிக்கும்.

நுரையீரல் மற்றும் உணவு மண்டலத்தில் ஏற்படும் மாற்றங்கள்:

நுரையீரலுக்கு ஆக்ஸிஜன் மிகுந்த இரத்தம் செல்கிறது. உணவு மண்டலத்தில் செரிமான சக்தி அதிகமாகிறது. இதன்மூலம் கர்ப்பிணிகளுக்கு அதிக அளவு சக்தி கிடைக்கிறது.

கர்ப்பகாலத்தில் ஏற்படும் சிறு உபாதைகள்:**நெஞ்சு எரிச்சல்:**

நெஞ்சு எரிச்சல் ஆனது இரண்டாவது மற்றும் மூன்றாவது கர்ப்பகாலம் வரை நீடிக்கிறது.

புரோஜெஸ்டிரேன் ஹார்மோன் அளவு அதிகரிக்கிறது. இதன்மூலம் உணவு குழாயில் உள்ள ஸ்பின்டர் சதையானது விரிவடைகிறது. இதனால் நெஞ்சு எரிச்சல் அதிகமாகிறது.

தடுப்பதற்கு:

தினமும் குறைந்த அளவு சாப்பாடு எடுத்துக் கொள்ள வேண்டும்.

குறைந்த அளவு கொழுப்புச் சத்துள்ள பொருட்களை எடுத்துக்கொண்டு, புரோட்டீன் அளவு அதிகம் உள்ள உணவு பொருட்களை உண்ண வேண்டும்.

வயிற்றுக்கு ஒவ்வாத உணவு பொருட்களை தவிர்க்க வேண்டும். (உதாரணம்: சாக்லெட், காபி, சிட்ரஸ் பழச்சாறு, தக்காளி ஜூஸ், ஆல்கஹால், அதிக காரமுள்ள உணவு பொருட்கள்.

கால் வீக்கம்:

மூன்றாவது அல்லது நான்காவது மாதத்தில் கால்களில் வீக்கம் வர ஆம்பிரக்கிறது. கர்ப்பகாலத்தில் இரத்த அழுத்தம் அதிகரிக்கிறது. இதனால் புரோஜெஸ்டிரேன் ஹார்மோன் அதிக அளவில் சுரப்பதால் இரத்த குழாய்களின் இரத்த ஓட்டம் மற்றும் இரத்த அழுத்தம் அதிகரிக்கிறது.

தடுப்பதற்கு:

கால்களை சற்று உயர்த்தி வைக்க வேண்டும்.

அதிக நேரம் நிற்பது அல்லது நடப்பதை தவிர்க்க வேண்டும்.

அதிக உயரமுள்ள காலணிகளை தவிர்க்க வேண்டும்.

பிடிப்பான ஆடைகளை உடுத்துவதை தவிர்க்க வேண்டும்.

பாதங்களை சுழற்றுதல், உடற்பயிற்சியை ஒரு நாளைக்கு 30 நிமிடங்களாவது பயிற்சி செய்ய வேண்டும்.

மூலம்:

இடுப்புப் பகுதியில் அழுத்தம் மற்றும் இரத்த ஓட்டம் அதிகரிப்பதால் சிறிய மூலம் உருவாகிறது. கர்ப்பபையின் அளவு அதிகரிப்பதனாலும் இடுப்புப் பகுதியில் அழுத்தம் அதிகரிப்பதாலும் மூலங்கள் உருவாகின்றன.

தடுப்பதற்கு:

அதிக அளவு நார்ச்சத்துள்ள உணவுபொருட்களை உண்ண வேண்டும்.

அதிக அளவு நீர் அருந்த வேண்டும்.

வாந்தி மற்றும் மயக்கம்:

வாந்தி மற்றும் மயக்கமானது ஒன்பதாவது வாரத்தில் இருந்து ஆரம்பிக்கிறது.

(hcg) ஹார்மோன் அதிக அளவில் சுரப்பதாலும் வாந்தி மற்றும் மயக்கம் உருவாகிறது.

தடுப்பதற்கு:

குறைந்த அளவு உணவுகளை எடுத்துக் கொள்ள வேண்டும்.

குறைந்த அளவு கொழுப்புச் சத்துள்ள பொருட்கள், குறைந்த அளவு கார்போஹைட்ரேட் உள்ள உணவுகள், அதிக அளவு புரோட்டீன் அளவு உணவுகளை எடுத்துக் கொள்ள வேண்டும்.

அதிக அளவு நீர்ச்சத்துள்ள உணவுகளை எடுத்துக் கொள்ள வேண்டும்.

வயிறு நிறைய சாப்பிடுவதை தவிர்க்க வேண்டும்.

பிறப்பு உறுப்புப் பாதையில் வெளியேற்றம்:

ஈஸ்ட்ரோஜன் ஹார்மோன் அதிக அளவில் சுரப்பதால் யோனி பாதையில் உள்ள செல்கள் வெளியேற்றப்படுகின்றன.

பாக்டீரியாவானது யோனி பாதையில் உள்ள செல்கள் அதிக அளவு கிளைக்கோஜன் இருப்பதால் அமிலத்தன்மை அதிகரிக்கிறது இதனால் லூயூக்கோரியா உருவாகிறது.

தடுப்பதற்கு:

சிறிய அளவு லூயூக்கோரியா ஆனது பாதிப்பை ஏற்படுத்தாது. ஆனால் அதிக அளவு இருந்தால் ஆய்வு கூடத்தில் ஆய்வு செய்து அதற்கான சிகிச்சைகளை மேற்கொள்ள வேண்டும்.

முதுகுவலி:

முதுகுவலியானது, அதிக நேரம் நிற்பதாலும், நடப்பதினாலும் அதிகரிக்கிறது. படுக்கையில் இருந்து எழும்புவதாலும் உருவாகிறது.

தடுப்பதற்கு:

முதுகுவலி அதிகமாக இருந்தால் பிசியோதெரபி ஆலோசனை செய்ய வேண்டும்.

கார்ப்காலத்தில் போடும் பெல்ட்டை உபயோகிக்க வேண்டும்.

அதிக அளவு உயரமுள்ள செருப்புகளை அணிவதை தவிர்க்க வேண்டும்.

கால் வலி:

வயிற்றுப் பகுதியில் அழுத்தம் அதிகரிப்பதால் கால் பகுதியில் உள்ள இரத்த குழாய்களின் அழுத்தமும் அதிகரிக்கிறது.

தடுப்பதற்கு:

கால்வலியை தடுப்பதற்கு நடக்கவும் மற்றும் மசாஜ் செய்ய வேண்டும்.

மிதமான சூட்டில் குளிக்க வேண்டும்.

மிக மெதுவான காலணிகளை அணிய வேண்டும்.

PHOTO - I



RESEARCHER ASSESSING DEMOGRAPHIC DATA

PHOTO -II



RESEARCHER ASSESSING ANTENATAL CARE

PHOTO –III



**RESEARCHER ASSESSING STRUCTURE TEACHING
PROGRAMME
PHOTO - IV**

